GEFRAN

GFX4-CANopen

MANUAL TO CANopen NETWORK CONFIGURATION AND INSTALLATION

Software version: **1.3x**

code: **80401E- 02-2022 - ENGLISH**

INDEX

1 • INTRODUCTION

The “GFX4” series of temperature control modules with **CANopen** Fieldbus interface provides rapid integration of a large number of compact temperature control units and control of the heating device (up to 2032 zones) within advanced automation systems (such as PLCs, Supervision Systems, etc.), interconnected via communication networks and protocols defined by the **standard**. This guide does not describe the “**CANopen**” Fieldbus: it is assumed that the user is familiar with it and, for updates, refers to such standard or to the official site managed by **C.i.A.** – **CAN** in Automation GmbH. **www.can-cia.org** .
It is also assumed that the user is familiar with the technical characteristics of GEFLEX products, as described in the user manuals enclosed with the product, or downloadable from the GEFRAN S.P.A. internet site **www.gefran.com** .

2 • BIBLIOGRAPHICAL REFERENCES

/1/ ISO 11898, Road vehicles – Interchange of digital information – Controller Area Network (CAN) for high speed communication, 1993
/2/ CiA DS 301 V4.01, CANopen Application Layer and Communication Profile, 2000
/3/ CiA DS 404 V1.20, CANopen Device Profile Measuring Device and Closed Loop Controllers, 2002
/4/ CiA DS 305 V1.00, CANopen Layer Setting Service and Protocol (LSS), 2000
/5/ CiA DS 205 V1.00, LMT Service and Protocol specification, 1996
/6/ CiA DR 303 V1.00, CANopen Cabling and Connector Pin Assignment, 1999
/7/ GEFRAN 80395x, GFX4 User’s Manual
/8/ GEFRAN 80397x, GFX4 Programming and Configuration

3 • MAIN TECHNICAL CHARACTERISTICS

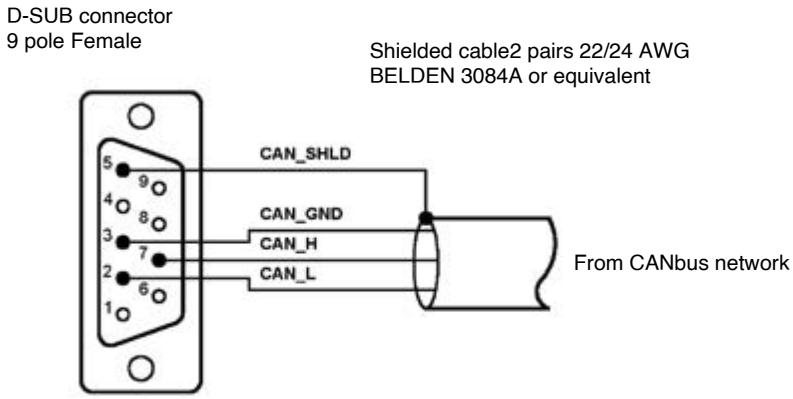
◊	NMT:	Slave
◊	Error Control:	Node Guarding, Heartbeat
◊	Node ID:	HW switch, LMT, LSS
◊	No. of PDOs:	32 TX, 32 RX
◊	PDO modes:	Event-triggered, Time-triggered, Sync(cyclic), Sync(acyclic), RTR
◊	PDO linking:	Yes
◊	PDO mapping:	Static
◊	No. of SDO:	1 Server, 0 Client
◊	Emergency Message:	Yes
◊	CANopen version:	DS 301 V4.0, DS 301 V3.0
◊	Framework:	No
◊	Certified:	No
◊	Device Profile:	DS 404 V1.2

For a complete description of installation procedures and main electrical connections, see the USER MANUAL for GFX4, enclosed with the products.

4 • INSTALLATION

In accordance with **/6/**, the shielded cable must have special characteristics to guarantee correct communication among **CANopen** devices:

4.1 ELECTRICAL CONNECTIONS TO THE CANBUS NETWORK



GEFRAN S.p.A. supplies approved **CANopen** cables and connection systems as accessories to GEFLEX instruments.

Bus length (m)	Bus cable (1)		Termination resistance (Ω)	Baudrate (Kbit/s)
	Length-related Resistance (mΩ/m)	Cross-section (mm^2)		
0 … 40	70	0.25 … 0.34	124	1000 at 40 m
40 … 300	< 60	0.34 … 0.5	150 … 300	> 500 at 100 m
300 … 600	< 40	0.5 … 0.6	150 … 300	> 100 at 500 m
600 … 1000	< 26	0.75 … 0.8	150 … 300	> 50 at 1 Km

4.2 ROTARY SWITCH AND DIP SWITCH SELECTION

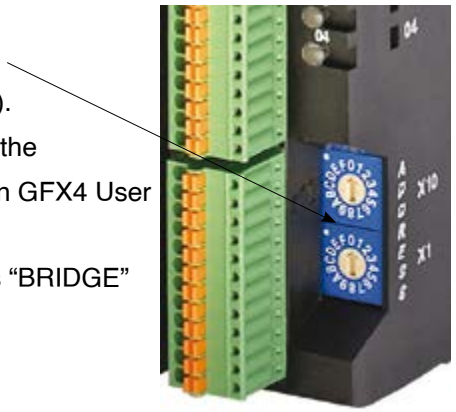
The hexadecimal rotary switches on the GFX4 indicate the node address of the CANopen network acquired when the instrument is switched on.

The GFX4 is factory-set with rotary switches in position “0.”

The customer has to assign the correct position (valid positions are 1 to 99).

The other rotary switch positions refer to the special functions described in the section 4.3 Hardware procedure to change CANopen port Baud Rate and in GFX4 User Manual in chapter for “Installation of serial network”.

With Dip Switch S7, the user can select the GFX4-CANopen work mode as “BRIDGE” (dip ON) or “HIGH PERFORMANCE” (dip OFF).

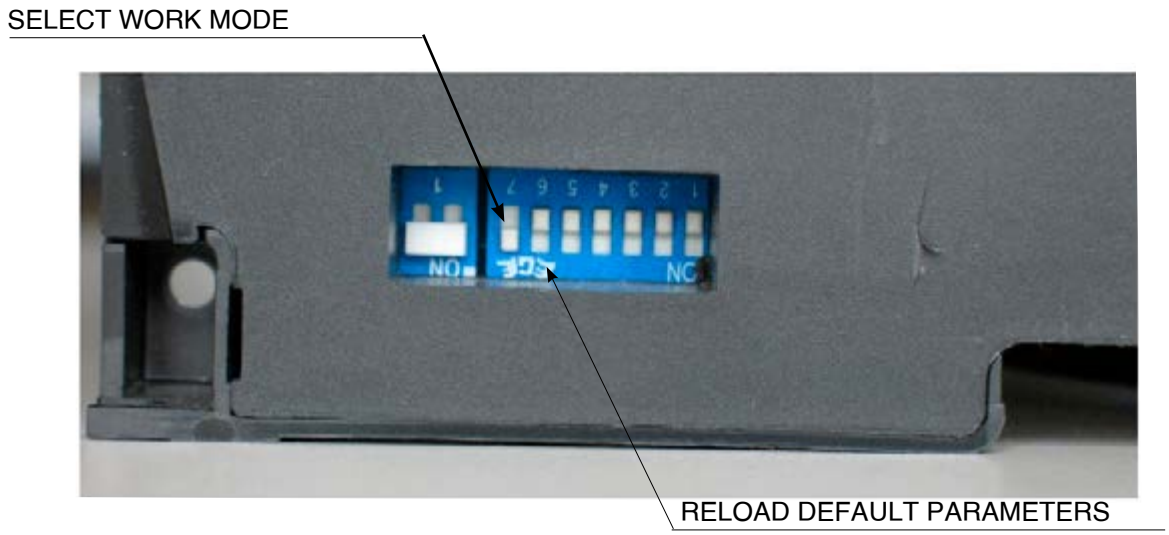


BRIDGE Mode

BRIDGE mode is default mode, in which the GFX4-CANopen acts as a BRIDGE between the CANopen network and the MODBUS subnetwork, by means of which you can connect to another 3 GFX-TERMO4s and control a maximum of 16 temperature control zones. Each zone uses 2 TXPDOs for a total of 32 RXPDOs and 32 TXPDOs occupying the COB-ID of 16 CANopen network nodes. The dictionary of objects is described in the “GGX4_Cxx. EDS” file.

HIGH PERFORMANCE Mode

HIGH PERFORMANCE mode lets you control only the 4 GFX-TERMO4 temperature control zones in which the GFX4-CAN board is housed. This instrument dialogs in the CANopen network via 4 RXPDOs and 4 TXPDOs, in which each PDO can transmit a maximum of 4 word objects, for a total of 16 words in read and 16 words in write, occupying only the COB-ID of the CANopen GFX4 code. The dictionary of objects is described in the “GFX4HCxx. EDS” file.



Managing the MODBUS subnetwork

The GFX4-CAN housed in the GFX4 or GFX TERMO4 acts as a Bridge between the CANopen network and the MODBUS network (19200 bps, 8 data, no parity), but management of the MODBUS subnetwork changes drastically based on the work mode set by Dip-Switch “S-7”: if BRIDGE, single words are read or written with each MODBUS communication; if HIGH PERFORMANCE, 16 words are read or written with each MODBUS communication, therefore, updating of variables in the CANopen network is much faster (100 msec) compared to BRIDGE, which in the most complete configuration can reach 2.4sec for “PV” or 7.2sec for other user-configurable variables.

GFX4 CANopen in “BRIDGE” MODE: by means of MODUS subnetwork, the GFX4 CANopen can be connected to three other GFX4s, to twelve GEFLEX Slaves 5A...120A, or to a combination of GFX4s and GEFLEX Slaves in order to control a maximum of 16 temperature control zones for each CANopen node.

The addresses of the added GFX4s must have an offset of four units (for example, if the GFX4 has address 10, the next ones will be 14, 18 and 22).

The addresses of the added GEFLEX Slaves must have an offset of four units for the first one connected and one unit for the others (for example, the GFX4 CANopen has address 10, the first GEFLEX Slave has address 14, the next ones 15, 16, 17, etc.).

To assign the node address to the GEFLEX Slaves, you have to activate the “AUTONODE” procedure, as described in GEFLEX manual code 80331x.

Dip switch “S6” in ON position at Power-ON resets default values of temperature controller variables and on CANopen communication parameters.

[A] Module power-on

[B] Set address

Select with rotary switches (x1 and x10), select

define module CANopen address (range 1-99)

[C] Select Baud Rate

Turn rotary switch for ones (x1) to one of the following positions:

0...1	Mbit/s
1...800	Kbit/s
2...500	Kbit/s
3...250	Kbit/s
4...125	Kbit/s
5...50	Kbit/s
6...20	Kbit/s
7...10	Kbit/s

[D] Acquire Baud Rate

Turn rotary switch for tens (x10) to position E

[E] Wait

Wait 10 sec

[F] Restore address

With rotary switches (x1 and x10) set the

address as at point [B]

[G] Wait

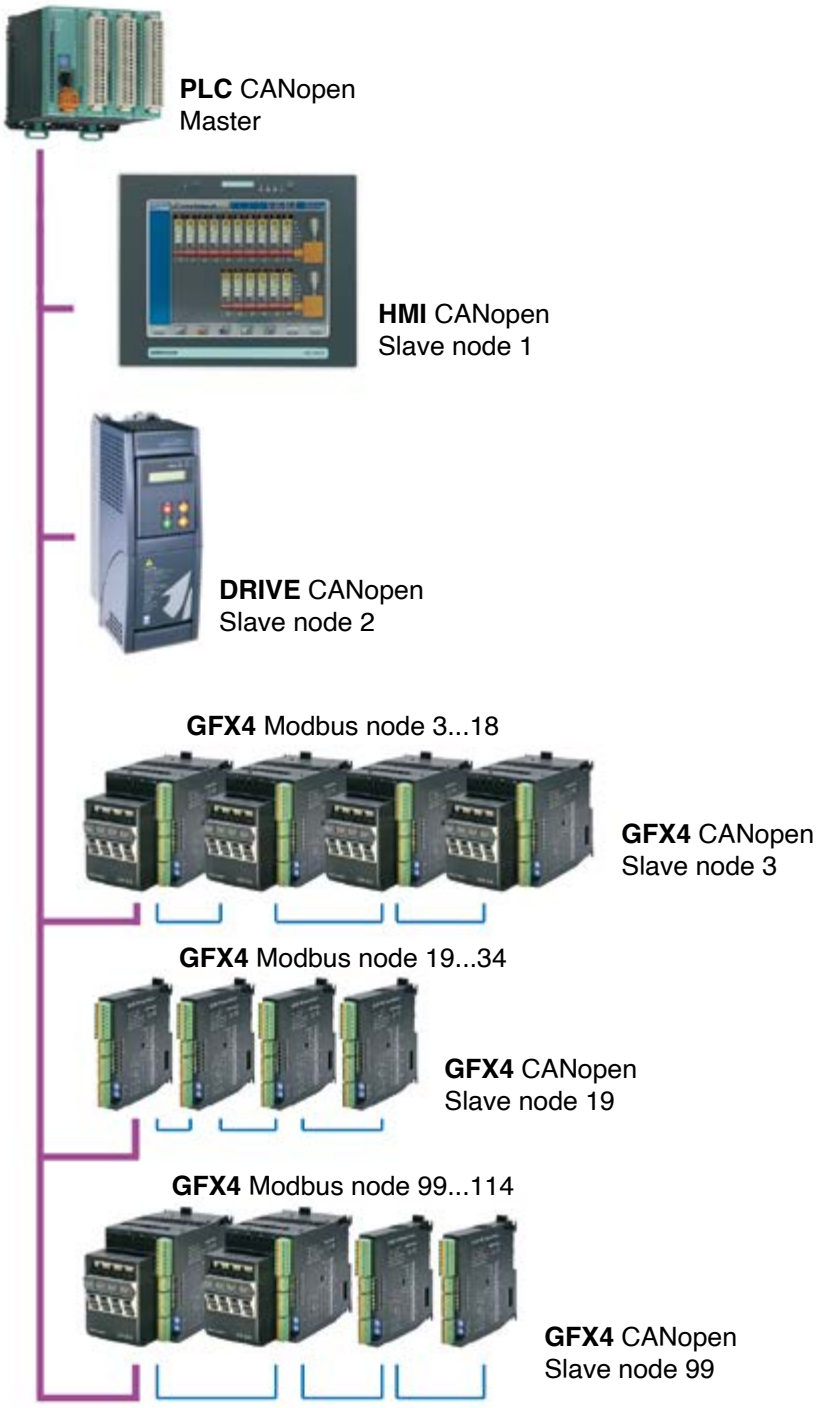
Wait 10 sec

[H] End

The module has acquired the new Baud Rate

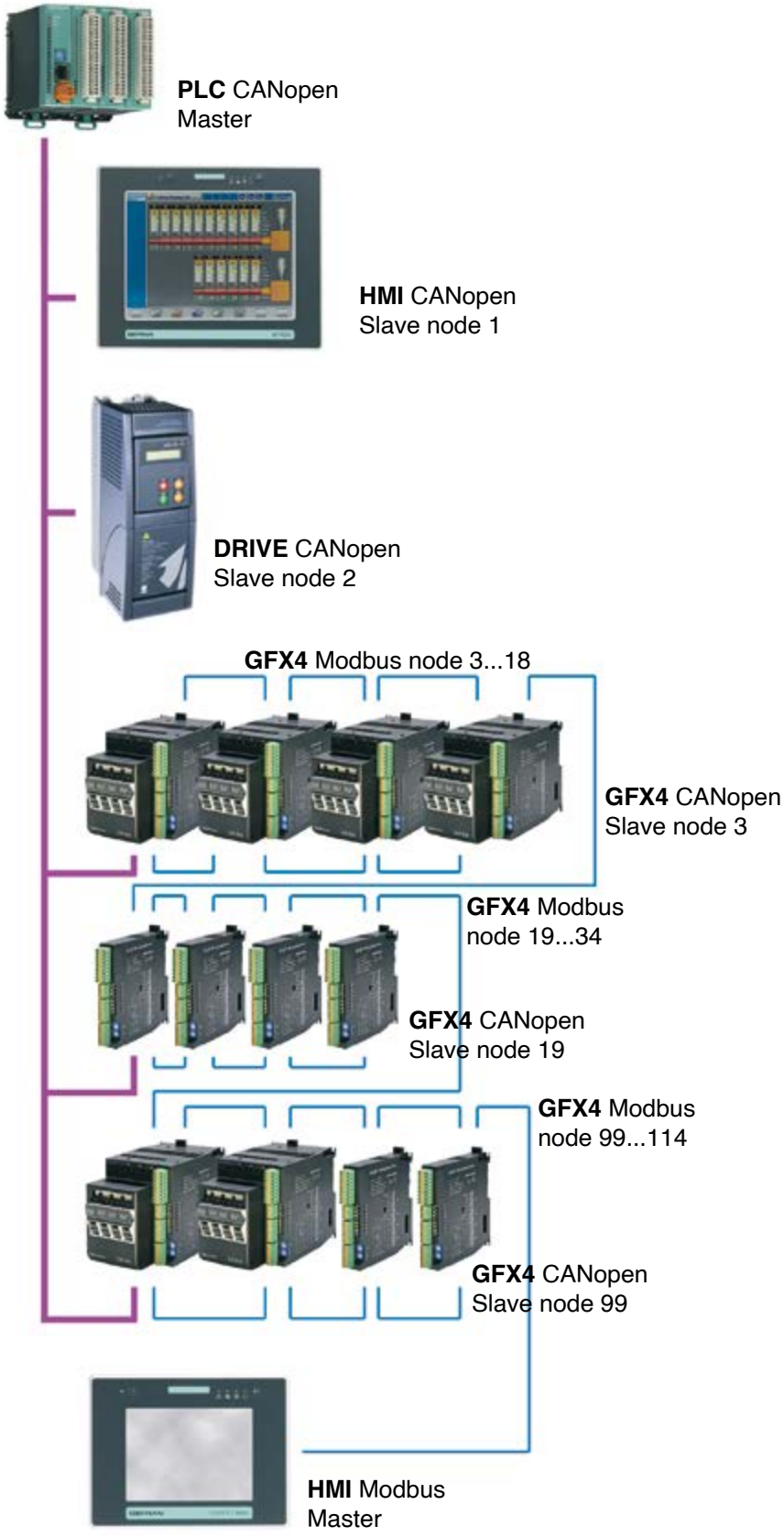
4.4 EXAMPLES OF CANOpen NETWORKS "BRIDGE" mode

EXAMPLE OF CANOPEN NETWORK WITH HARDWARE ADDRESS SELECTION
(PDO ENABLED)



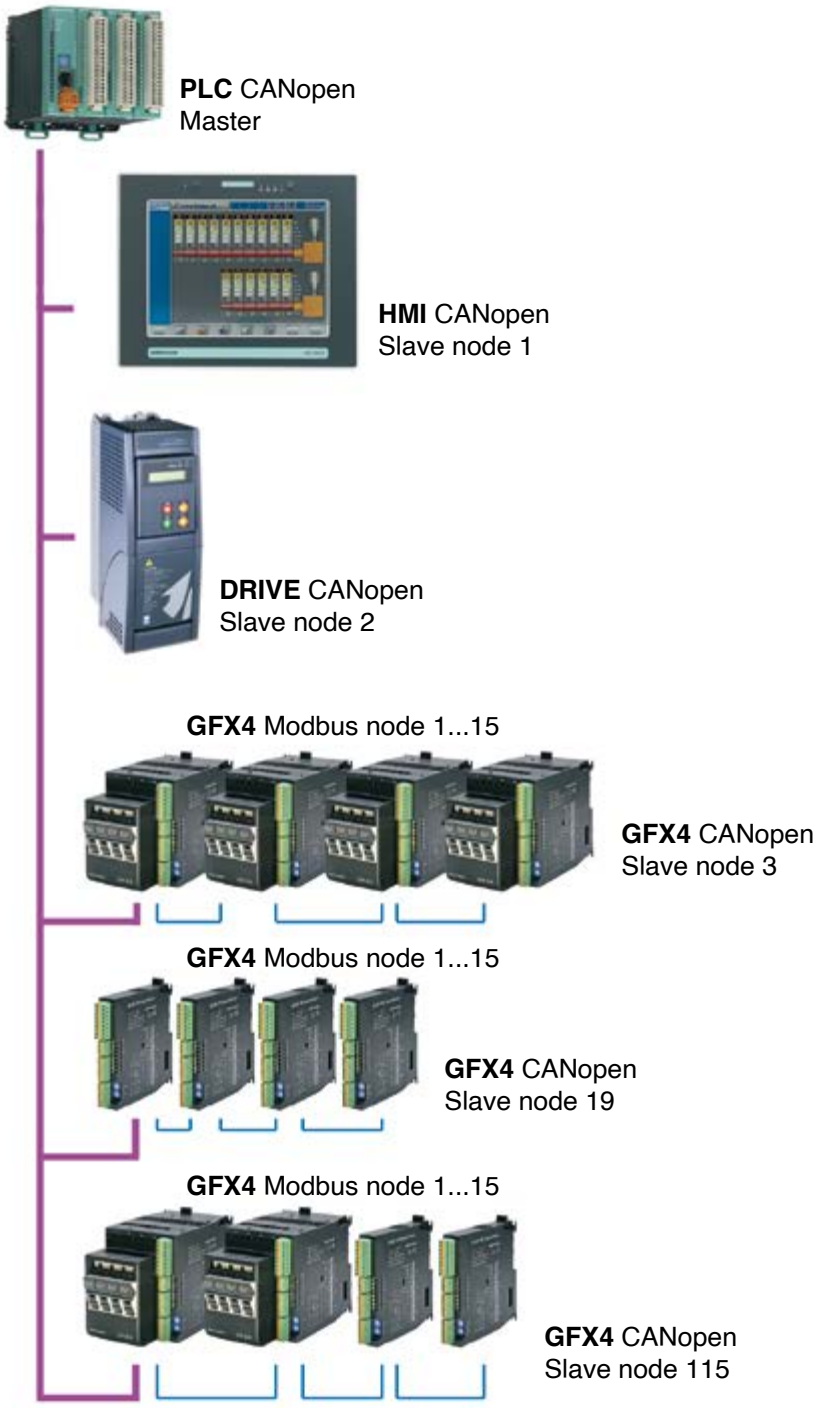
- Max. number of GFX4 CANopen nodes: 7
- Max. number of temperature control zones: 7 * 16 = 112
- MODBUS network common only for groups of 4 GFX4s

EXAMPLE OF CANOPEN NETWORK WITH HARDWARE ADDRESS SELECTION
WITH USE OF SECOND MODBUS NETWORK



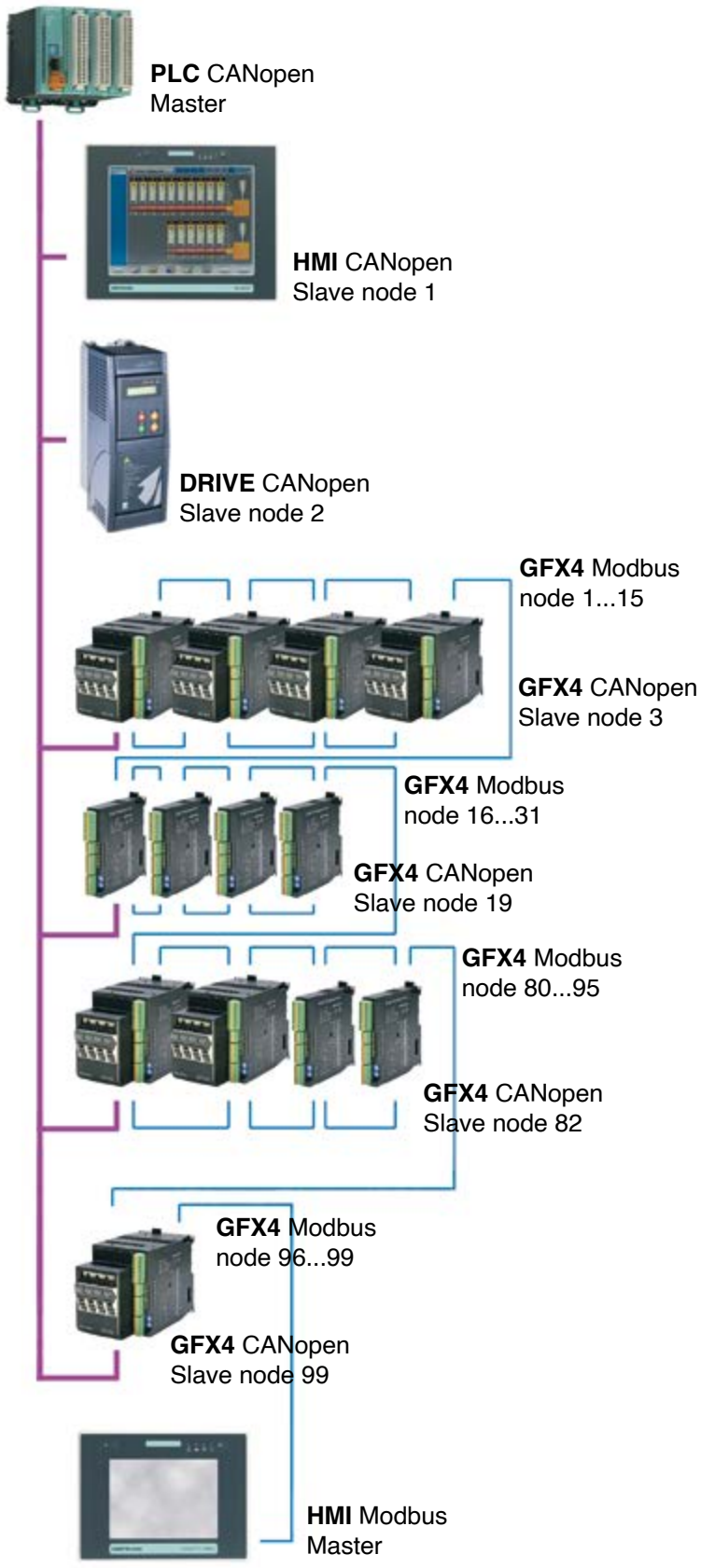
- Max. number of GFX4 CANopen nodes: 7
- Max. number of temperature control zones: 7 * 16 = 112
- MODBUS network common for 28 GFX4

EXAMPLE OF CANOPEN NETWORK WITH SOFTWARE ADDRESS SELECTION
(PDO ENABLED)



- Max. number of GFX4 CANopen nodes: 8
- Max. number of temperature control zones: 8 * 16 = 128
- MODBUS network common only for groups of 4 GFX4s
- The rotary switch is used to identify the MODBUS devices

EXAMPLE OF CANOPEN NETWORK WITH SOFTWARE ADDRESS SELECTION
WITH USE OF SECOND MODBUS NETWORK



- Max. number of GFX4 CANopen nodes: 7
- Max. number of temperature control zones: (6 * 16) + 4 = 100
- MODBUS network common for 25 GFX4
- The rotary switch is used to identify the MODBUS devices

5.1 DEFAULT PDO MAPPING

PDO	COB-ID PREDEFINED (hex)	OBJECT 1 INDEX (hex)	OBJECT 1 SUB (hex)	OBJECT 2 INDEX (hex)	OBJECT 2 SUB (hex)	OBJECT 3 INDEX (hex)	OBJECT 3 SUB (hex)	DESCRIPTION
01 TPDO	00000180+ID	7130	01	2000	01	6600	01	1st transmit PDO GEFLEX Master
02 TPDO	00000280+ID	6410	01	7400	01	6600	01	2nd transmit PDO GEFLEX Master
03 TPDO	00000181+ID	7130	02	2000	02	6600	02	1st transmit PDO GEFLEX Slave 1
04 TPDO	00000281+ID	6410	02	7400	02	6600	02	2nd transmit PDO GEFLEX Slave 1
05 TPDO	00000182+ID	7130	03	2000	03	6600	03	1st transmit PDO GEFLEX Slave 2
06 TPDO	00000282+ID	6410	03	7400	03	6600	03	2nd transmit PDO GEFLEX Slave 2
07 TPDO	00000183+ID	7130	04	2000	04	6600	04	1st transmit PDO GEFLEX Slave 3
08 TPDO	00000283+ID	6410	04	7400	04	6600	04	2nd transmit PDO GEFLEX Slave 3
09 TPDO	00000184+ID	7130	05	2000	05	6600	05	1st transmit PDO GEFLEX Slave 4
10 TPDO	00000284+ID	6410	05	7400	05	6600	05	2nd transmit PDO GEFLEX Slave 4
11 TPDO	00000185+ID	7130	06	2000	06	6600	06	1st transmit PDO GEFLEX Slave 5
12 TPDO	00000285+ID	6410	06	7400	06	6600	06	2nd transmit PDO GEFLEX Slave 5
13 TPDO	00000186+ID	7130	07	2000	07	6600	07	1st transmit PDO GEFLEX Slave 6
14 TPDO	00000286+ID	6410	07	7400	07	6600	07	2nd transmit PDO GEFLEX Slave 6
15 TPDO	00000187+ID	7130	08	2000	08	6600	08	1st transmit PDO GEFLEX Slave 7
16 TPDO	00000287+ID	6410	08	7400	08	6600	08	2nd transmit PDO GEFLEX Slave 7
17 TPDO	00000188+ID	7130	09	2000	09	6600	09	1st transmit PDO GEFLEX Slave 8
18 TPDO	00000288+ID	6410	09	7400	09	6600	09	2nd transmit PDO GEFLEX Slave 8
19 TPDO	00000189+ID	7130	0A	2000	0A	6600	0A	1st transmit PDO GEFLEX Slave 9
20 TPDO	00000289+ID	6410	0A	7400	0A	6600	0A	2nd transmit PDO GEFLEX Slave 9
21 TPDO	0000018A+ID	7130	0B	2000	0B	6600	0B	1st transmit PDO GEFLEX Slave 10
22 TPDO	0000028A+ID	6410	0B	7400	0B	6600	0B	2nd transmit PDO GEFLEX Slave 10
23 TPDO	0000018B+ID	7130	0C	2000	0C	6600	0C	1st transmit PDO GEFLEX Slave 11
24 TPDO	0000028B+ID	6410	0C	7400	0C	6600	0C	2nd transmit PDO GEFLEX Slave 11
25 TPDO	0000018C+ID	7130	0D	2000	0D	6600	0D	1st transmit PDO GEFLEX Slave 12
26 TPDO	0000028C+ID	6410	0D	7400	0D	6600	0D	2nd transmit PDO GEFLEX Slave 12
27 TPDO	0000018D+ID	7130	0E	2000	0E	6600	0E	1st transmit PDO GEFLEX Slave 13
28 TPDO	0000028D+ID	6410	0E	7400	0E	6600	0E	2nd transmit PDO GEFLEX Slave 13
29 TPDO	0000018E+ID	7130	0F	2000	0F	6600	0F	1st transmit PDO GEFLEX Slave 14
30 TPDO	0000028E+ID	6410	0F	7400	0F	6600	0F	2nd transmit PDO GEFLEX Slave 14
31 TPDO	0000018F+ID	7130	10	2000	10	6600	10	1st transmit PDO GEFLEX Slave 15
32 TPDO	0000028F+ID	6410	10	7400	10	6600	10	2nd transmit PDO GEFLEX Slave 15
01 RPDO	00000200+ID	750A	01	751A	01	-	-	1st receive PDO GEFLEX Master
02 RPDO	00000300+ID	2020	01	6412	01	6425	01	2nd receive PDO GEFLEX Master
03 RPDO	00000201+ID	750A	02	751A	02	-	-	1st receive PDO GEFLEX Slave 1
04 RPDO	00000301+ID	2020	02	6412	02	6425	02	2nd receive PDO GEFLEX Slave 1
05 RPDO	00000202+ID	750A	03	751A	03	-	-	1st receive PDO GEFLEX Slave 2
06 RPDO	00000302+ID	2020	03	6412	03	6425	03	2nd receive PDO GEFLEX Slave 2
07 RPDO	00000203+ID	750A	04	751A	04	-	-	1st receive PDO GEFLEX Slave 3
08 RPDO	00000303+ID	2020	04	6412	04	6425	04	2nd receive PDO GEFLEX Slave 3
09 RPDO	00000204+ID	750A	05	751A	05	-	-	1st receive PDO GEFLEX Slave 4
10 RPDO	00000304+ID	2020	05	6412	05	6425	05	2nd receive PDO GEFLEX Slave 4
11 RPDO	00000205+ID	750A	06	751A	06	-	-	1st receive PDO GEFLEX Slave 5
12 RPDO	00000305+ID	2020	06	6412	06	6425	06	2nd receive PDO GEFLEX Slave 5
13 RPDO	00000206+ID	750A	07	751A	07	-	-	1st receive PDO GEFLEX Slave 6
14 RPDO	00000306+ID	2020	07	6412	07	6425	07	2nd receive PDO GEFLEX Slave 6
15 RPDO	00000207+ID	750A	08	751A	08	-	-	1st receive PDO GEFLEX Slave 7
16 RPDO	00000307+ID	2020	08	6412	08	6425	08	2nd receive PDO GEFLEX Slave 7
17 RPDO	00000208+ID	750A	09	751A	09	-	-	1st receive PDO GEFLEX Slave 8
18 RPDO	00000308+ID	2020	09	6412	09	6425	09	2nd receive PDO GEFLEX Slave 8
19 RPDO	00000209+ID	750A	0A	751A	0A	-	-	1st receive PDO GEFLEX Slave 9
20 RPDO	00000309+ID	2020	0A	6412	0A	6425	0A	2nd receive PDO GEFLEX Slave 9
21 RPDO	0000020A+ID	750A	0B	751A	0B	-	-	1st receive PDO GEFLEX Slave 10
22 RPDO	0000030A+ID	2020	0B	6412	0B	6425	0B	2nd receive PDO GEFLEX Slave 10

5.1 DEFAULT PDO MAPPING GFX4_C06.EDS

PDO	COB-ID PREDEFINED (hex)	OBJECT 1		OBJECT 2		OBJECT 3		DESCRIPTION
		INDEX (hex)	SUB (hex)	INDEX (hex)	SUB (hex)	INDEX (hex)	SUB (hex)	
23 RPDO	0000020B+ID	750A	0C	751A	0C	-	-	1st receive PDO GEFLEX Slave 11
24 RPDO	0000030B+ID	2020	0C	6412	0C	6425	0C	2nd receive PDO GEFLEX Slave 11
25 RPDO	0000020C+ID	750A	0D	751A	0D	-	-	1st receive PDO GEFLEX Slave 12
26 RPDO	0000030C+ID	2020	0D	6412	0D	6425	0D	2nd receive PDO GEFLEX Slave 12
27 RPDO	0000020D+ID	750A	0E	751A	0E	-	-	1st receive PDO GEFLEX Slave 13
28 RPDO	0000030D+ID	2020	0E	6412	0E	6425	0E	2nd receive PDO GEFLEX Slave 13
29 RPDO	0000020E+ID	750A	0F	751A	0F	-	-	1st receive PDO GEFLEX Slave 14
30 RPDO	0000030E+ID	2020	0F	6412	0F	6425	0F	2nd receive PDO GEFLEX Slave 14
31 RPDO	0000020F+ID	750A	10	751A	10	-	-	1st receive PDO GEFLEX Slave 15
32 RPDO	0000030F+ID	2020	10	6412	10	6425	10	2nd receive PDO GEFLEX Slave 15

5.2 PDO MAPPING OBJECTS NAMES GFX4_C06.EDS

PDO	OBJECT 1	OBJECT 2	OBJECT 3
1st TXPDO	Process variable	Instrument work status	Status of alarms AL1-AL4
2nd TXPDO (note 1)	Control output value	CT input value	Status of alarms AL1-AL4
1st RXPDO (note 2)	Alarm AL1 setpoint	Alarm AL2 setpoint	-
2nd RXPDO	Local Set point	Control output value	Controller controls

note 1: The objects of 2nd TXPDO are mappable through index 5A5C

note 2: The objects of 1st RXPDO are mappable through index 5A5E

5.3 LIST OF PDO'S MAPPING OBJECTS GFX4_C06.EDS

INDEX (hex)	SUB INDEX	DESCRIPTION	DATA TYPE	ACC.	DEFAULT (hex)	FUNCTION (dec)	ADD.
2000	n	Operating state instrument	unsigned16	ro	-	---	467
2001	n	Variable of process	integer16	ro	-	P.V.	0
2002	n	Active Setpoint	integer16	ro	-	SPA	1
2003	n	Value of auxiliary input	integer16	ro	-	I.tA1	227
2004	n	Actual value of control output	integer16	ro	-	Ou.P	2
201C	n	Variable of process after filter FLd	integer16	ro	-	---	349
201D	n	MASKOUT digital/relays output	unsigned16	ro	-	---	319
201E	n	STATUS_W Instrum operations commands	unsigned16	rw	-	---	305
201F	n	INPUT_DIG digital inputs	unsigned16	ro	-	---	317
2020	n	Local Setpoint	integer16	rw	0190	_SP	138
2021	n	State operative instrum. 1	unsigned16	ro	-	---	469
2022	n	State operative instrum. 2 (see note 9)	unsigned16	ro	-	---	632
2023	n	State operative instrum. 3 (see note 10)	unsigned16	ro	-	---	633
2024	n	State operative instrum. 4 (see note 11)	unsigned16	ro	-	---	634
2025	n	SPA - PV Deviation	integer16	ro	-	---	4
2026	n	Internal temperature instrument	unsigned16	ro	-	---	635
2027	n	Derivative temperature internal heatsink	unsigned16	ro	-	DERIV_SSR	675
2028	n	Internal temperature heatsink	unsigned16	ro	-	---	655
2029	n	ALSTATE IRQ state alarm	unsigned16	ro	-	---	318
202A	n	HB ALSTATE_HB state alarm	unsigned16	ro	-	---	504
202B	n	ALSTATE state alarm	unsigned16	ro	-	---	512
2030	n	Voltmetric input value phase 1	integer16	ro	-	I.tU1	232
2031	n	Voltmetric input value phase 2	integer16	ro	-	I.tU2	492
2032	n	Voltmetric input value phase 3	integer16	ro	-	I.tU3	493
2033	n	Ammeter input value phase 1	integer16	ro	-	I.tA1on	468
2034	n	Ammeter input value phase 2	integer16	ro	-	I.tA2on	498
2035	n	Ammeter input value phase 3	integer16	ro	-	I.tA3on	499
2036	n	Ammeter input value instantaneous phase 1	integer16	ro	-	I.tA1	473
2037	n	Ammeter input value instantaneous phase 2	integer16	ro	-	I.tA2	490
2038	n	Ammeter input value instantaneous phase 3	integer16	ro	-	I.tA3	491
2039	n	Voltmetric input value filtered phase 1	integer16	ro	-	I.UF1	322
203A	n	Voltmetric input value filtered phase 2	integer16	ro	-	I.UF2	496
203B	n	Voltmetric input value filtered phase 3	integer16	ro	-	I.UF3	497
203C	n	Ammeter input value filtered phase 1	integer16	ro	-	I.AF1	756
203D	n	Ammeter input value filtered phase 2	integer16	ro	-	I.AF2	494
203E	n	Ammeter input value filtered phase 3	integer16	ro	-	I.AF3	495
2040	n	HB threshold alarm phase 1	integer16	rw	0064	A.Hb1	55
2041	n	HB threshold alarm phase 2	integer16	rw	0064	A.Hb2	502
2042	n	HB threshold alarm phase 3	integer16	rw	0064	A.Hb3	503
2056	n	Flag PID state	unsigned16	ro	-	---	296
209F	n	Value of auxiliary analogue input	integer16	ro	-	In.2	602

INDEX (hex)	SUB INDEX	DESCRIPTION	DATA TYPE	ACC.	DEFAULT (hex)	FUNCTION (dec)	ADD.
20B0	n	Voltage status (see note)	unsigned16	ro	-	---	702
20B1	n	Frequency (see note)	unsigned16	ro	-	FrEq	315
20B2	n	Current of peak in softstart of phase (see note)	unsigned16	ro	-	I.tAP	709
20B3	n	Concatenate voltage V21 (see note)	unsigned16	ro	-	I.V21	710
20B4	n	Concatenate voltage V32 (see note)	unsigned16	ro	-	I.V32	711
20B5	n	Concatenate voltage V13 (see note)	unsigned16	ro	-	I.V13	712
20B6	n	Factor of power (see note)	unsigned16	ro	-	CoS.F	716
20B7	n	Loaded power monophase (see note)	unsigned16	ro	-	Ld.P	719
20B8	n	Loaded power threephase (see note)	unsigned16	ro	-	Ld.P.t	720
20B9	n	Loaded impedance monophase (see note)	unsigned16	ro	-	Ld.I	749
20BA	n	Loaded impedance threephase (see note)	unsigned16	ro	-	Ld.I.t	750
20BB	n	Loaded voltage monophase (see note)	unsigned16	ro	-	Ld.V	751
20BC	n	Loaded voltage threephase (see note)	unsigned16	ro	-	Ld.V.t	752
20BD	n	Loaded current monofase (see note)	unsigned16	ro	-	Ld.A	753
20BE	n	Loaded current threephase (see note)	unsigned16	ro	-	Ld.A.t	754
20BF	n	Threshold dynamic alarm HB (see note)	unsigned16	ro	-	Hb.tr	744
20CF	n	Feedback reference (see note)	unsigned16	ro	-	AriF	757
2226	n	Serial remote setpoint	integer16	rw	-	SP.rS	250
2236	n	IN.1 input value from serial communic.	unsigned16	rw	0000	VALUE_F	347
2237	n	IN.2 input value from serial communic.	unsigned16	rw	0000	VALAUX_F	348
2238	n	IN.CT input value from serial communic.	unsigned16	rw	0000	VALTA_F	685
2371	n	User 1 configuration	unsigned16	rw	-	---	458
2372	n	User 2 configuration	unsigned16	rw	-	---	459
2373	n	User 3 configuration	unsigned16	rw	-	---	460
2374	n	User 4 configuration	unsigned16	rw	-	---	461
2375	n	User 5 configuration	unsigned16	rw	-	---	462
5A5F	0	Operative pushbutton GFX-OP	unsigned16	ro	-	---	685
6410	n	Actual value of control output	integer16	ro	-	Ou.P	2
6412	n	Value of control output in manuae	integer16	rw	0000	Ou.P	252
7130	n	Process variable	integer16	ro	-	P.V.	0
7400	n	Value of ammeter input	integer16	ro	-	I.tA1on	468
7401	n	Active Setpoint	integer16	r0	-	SPA	1
7402	n	Setpoint 1	integer16	rw	0064	SP.1	230
7403	n	Setpoint 2	integer16	rw	00C8	SP.2	231
750A	n	Threshold alarm 1	integer16	rw	01F4	AL.1	12
751A	n	Threshold alarm 2	integer16	rw	0258	AL.2	13
752A	n	Threshold alarm 3	integer16	rw	02BC	AL.3	14
753A	n	Threshold alarm 4	integer16	rw	0320	AL.4	58

NOTE: objects visible only with GFX4-IR

6.1 COMMUNICATION PROFILE

INDEX (hex)	SUB INDEX	DESCRIPTION	DATA TYPE	ACC.	DEFAULT (hex)
1000	0	Device type	unsigned32	ro	00320194
1001	0	Error register	unsigned8	ro	-
1002	0	Manufacturer status register	unsigned32	ro	-
1003	0	Number of error in pre-defined error field	unsigned8	rw	-
	1	Error field n	unsigned32	ro	-
	2	Error field n-1	unsigned32	ro	-
	3	Error field n-2	unsigned32	ro	-
	4	Error field n-3	unsigned32	ro	-
	5	Error field n-4	unsigned32	ro	-
	6	Error field n-5	unsigned32	ro	-
	7	Error field n-6	unsigned32	ro	-
	8	Error field n-7	unsigned32	ro	-
1004	0	Nr. of PDOs supported	unsigned32	ro	00140014
	1	Nr. of synchronous PDOs	unsigned32	ro	00000014
	2	Nr. of asynchronous PDOs	unsigned32	ro	00140014
1005	0	COB-IB SYNC message	unsigned32	rw	00000080
1008	0	Manufact. device name (GFX)	string	ro	20584647
1009	0	Manufacturer hardware version	string	ro	01
100A	0	Manufacturer software version	string	ro	0130
100B	0	Node-ID	unsigned32	ro	-
100C	0	Guard Time	unsigned16	rw	0000
100D	0	Life Time Factor	unsigned8	rw	00
100E	0	Node Guarding Identifier	unsigned32	rw	00000700+ID
100F	0	Number of SDOs supported	unsigned32	ro	00000001
1010	0	Number of Store parameters function	unsigned8	ro	04
	1	Save all parameters	unsigned32	rw	00000001
	2	Save communication parameters	unsigned32	rw	00000001
	3	Save application parameters	unsigned32	rw	00000001
	4	Save manufacturer parameters	unsigned32	rw	00000001
1011	0	Number of Restore parameters function	unsigned8	ro	04
	1	Restore all parameters	unsigned32	rw	00000001
	2	Restore communication parameters	unsigned32	rw	00000001
	3	Restore application parameters	unsigned32	rw	00000001
	4	Restore manufacturer parameters	unsigned32	rw	00000001
1014	0	COB-IB Emergency Object	unsigned32	rw	00000080+ID
1016	0	Number of Consumer Heartbeat Time	unsigned8	ro	01
	1	Consumer Heartbeat Time	unsigned32	rw	00000000
1017	0	Producer Heartbeat Time	unsigned16	rw	01F4
1018	0	Number of Identity Object	unsigned8	ro	04
	1	Vendor ID	unsigned32	ro	01000093
	2	Product code (see note 16)	unsigned32	ro	000000C0
	3	Revision number	unsigned32	ro	00000000
	4	Serial number	unsigned32	ro	-

INDEX (hex)	SUB INDEX	DESCRIPTION	DATA TYPE	ACC.	DEFAULT (hex)
1029	0	Nr. of Error Classes	unsigned8	ro	7
	1	Communication Error (see note 14)	unsigned8	rw	0
	2	Digital Input Error	unsigned8	rw	0
	3	Analog Input Error	unsegned8	rw	0
	4	Digital Output Error	unsigned8	rw	0
	5	Analog Output Error	unsigned8	rw	0
	6	Controller Error	unsigned8	rw	0
	7	Alarm Error	unsigned8	rw	0
1200	0	Nr. of Server SDO Parameter	unsigned8	ro	02
	1	COB-ID RX SDO	unsigned32	ro	00000600+ID
	2	COB-ID TX SDO	unsigned32	ro	00000580+ID
1400	0	Nr. of RPDO1 Communication parameter	unsigned8	ro	05
	1	COB-ID 1st RPDO Geflex Master	unsigned32	rw	00000200+ID
	2	Trasmission type 1st RPDO Geflex Master	unsigned8	rw	FD
	3	Inhibit time 1st RPDO Geflex Master	unsigned16	rw	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 1st RPDO Geflex Master	unsigned16	rw	0
1401	0	Nr. of RPDO2 Communication parameter	unsigned8	ro	05
	1	COB-ID 2nd RPDO Geflex Master	unsigned32	rw	00000300+ID
	2	Trasmission type 2nd RPDO Geflex Master	unsigned8	rw	FD
	3	Inhibit time 2nd RPDO Geflex Master	unsigned16	rw	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 2nd RPDO Geflex Master	unsigned16	rw	0
1402	0	Nr. of RPDO3 Communication parameter	unsigned8	ro	05
	1	COB-ID 1st RPDO Geflex Slave 1	unsigned32	rw	00000201+ID
	2	Trasmission type 1st RPDO Geflex Slave 1	unsigned8	rw	FD
	3	Inhibit time 1st RPDO Geflex Slave 1	unsigned16	rw	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 1st RPDO Geflex Slave 1	unsigned16	rw	0
1403	0	Nr. of RPDO4 Communication parameter	unsigned8	ro	05
	1	COB-ID 2nd RPDO Geflex Slave 1	unsigned32	rw	00000301+ID
	2	Trasmission type 2nd RPDO Geflex Slave 1	unsigned8	rw	FD
	3	Inhibit time 2nd RPDO Geflex Slave 1	unsigned16	rw	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 2nd RPDO Geflex Slave 1	unsigned16	rw	0
1404	0	Nr. of RPDO5 Communication parameter	unsigned8	ro	05
	1	COB-ID 1st RPDO Geflex Slave 2	unsigned32	rw	00000202+ID
	2	Trasmission type 1st RPDO Geflex Slave 2	unsigned8	rw	FD
	3	Inhibit time 1st RPDO Geflex Slave 2	unsigned16	rw	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 1st RPDO Geflex Slave 2	unsigned16	rw	0
1405	0	Nr. of RPDO6 Communication parameter	unsigned8	ro	05
	1	COB-ID 2nd RPDO Geflex Slave 2	unsigned32	rw	00000302+ID
	2	Trasmission type 2nd RPDO Geflex Slave 2	unsigned8	rw	FD
	3	Inhibit time 2nd RPDO Geflex Slave 2	unsigned16	rw	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 2nd RPDO Geflex Slave 2	unsigned16	rw	0

INDEX (hex)	SUB INDEX	DESCRIPTION	DATA TYPE	ACC.	DEFAULT (hex)
1406	0	Nr. of RPDO7 Communication parameter	unsigned8	ro	05
	1	COB-ID 1st RPDO Geflex Slave 3	unsigned32	rw	00000203+ID
	2	Trasmission type 1st RPDO Geflex Slave 3	unsigned8	rw	FD
	3	Inhibit time 1st RPDO Geflex Slave 3	unsigned16	rw	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 1st RPDO Geflex Slave 3	unsigned16	rw	0
1407	0	Nr. of RPDO8 Communication parameter	unsigned8	ro	05
	1	COB-ID 2nd RPDO Geflex Slave 3	unsigned32	rw	00000303+ID
	2	Trasmission type 2nd RPDO Geflex Slave 3	unsigned8	rw	FD
	3	Inhibit time 2nd RPDO Geflex Slave 3	unsigned16	rw	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 2nd RPDO Geflex Slave 3	unsigned16	rw	0
1408	0	Nr. of RPDO9 Communication parameter	unsigned8	ro	05
	1	COB-ID 1st RPDO Geflex Slave 4	unsigned32	rw	00000204+ID
	2	Trasmission type 1st RPDO Geflex Slave 4	unsigned8	rw	FD
	3	Inhibit time 1st RPDO Geflex Slave 4	unsigned16	rw	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 1st RPDO Geflex Slave 4	unsigned16	rw	0
1409	0	Nr. of RPDO10 Communication parameter	unsigned8	ro	05
	1	COB-ID 2nd RPDO Geflex Slave 4	unsigned32	rw	00000304+ID
	2	Trasmission type 2nd RPDO Geflex Slave 4	unsigned8	rw	FD
	3	Inhibit time 2nd RPDO Geflex Slave 4	unsigned16	rw	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 2nd RPDO Geflex Slave 4	unsigned16	rw	0
140A	0	Nr. of RPDO11 Communication parameter	unsigned8	ro	05
	1	COB-ID 1st RPDO Geflex Slave 5	unsigned32	rw	00000205+ID
	2	Trasmission type 1st RPDO Geflex Slave 5	unsigned8	rw	FD
	3	Inhibit time 1st RPDO Geflex Slave 5	unsigned16	rw	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 1st RPDO Geflex Slave 5	unsigned16	rw	0
140B	0	Nr. of RPDO12 Communication parameter	unsigned8	ro	05
	1	COB-ID 2nd RPDO Geflex Slave 5	unsigned32	rw	00000305+ID
	2	Trasmission type 2nd RPDO Geflex Slave 5	unsigned8	rw	FD
	3	Inhibit time 2nd RPDO Geflex Slave 5	unsigned16	rw	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 2nd RPDO Geflex Slave 5	unsigned16	rw	0
140C	0	Nr. of RPDO13 Communication parameter	unsigned8	ro	05
	1	COB-ID 1st RPDO Geflex Slave 6	unsigned32	rw	00000206+ID
	2	Trasmission type 1st RPDO Geflex Slave 6	unsigned8	rw	FD
	3	Inhibit time 1st RPDO Geflex Slave 6	unsigned16	rw	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 1st RPDO Geflex Slave 6	unsigned16	rw	0
140D	0	Nr. of RPDO14 Communication parameter	unsigned8	ro	05
	1	COB-ID 2nd RPDO Geflex Slave 6	unsigned32	rw	00000306+ID
	2	Trasmission type 2nd RPDO Geflex Slave 6	unsigned8	rw	FD
	3	Inhibit time 2nd RPDO Geflex Slave 6	unsigned16	rw	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 2nd RPDO Geflex Slave 6	unsigned16	rw	0

INDEX (hex)	SUB INDEX	DESCRIPTION	DATA TYPE	ACC.	DEFAULT (hex)
140E	0	Nr. of RPDO15 Communication parameter	unsigned8	ro	05
	1	COB-ID 1st RPDO Geflex Slave 7	unsigned32	rw	00000207+ID
	2	Trasmission type 1st RPDO Geflex Slave 7	unsigned8	rw	FD
	3	Inhibit time 1st RPDO Geflex Slave 7	unsigned16	rw	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 1st RPDO Geflex Slave 7	unsigned16	rw	0
140F	0	Nr. of RPDO16 Communication parameter	unsigned8	ro	05
	1	COB-ID 2nd RPDO Geflex Slave 7	unsigned32	rw	00000307+ID
	2	Trasmission type 2nd RPDO Geflex Slave 7	unsigned8	rw	FD
	3	Inhibit time 2nd RPDO Geflex Slave 7	unsigned16	rw	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 2nd RPDO Geflex Slave 7	unsigned16	rw	0
1410	0	Nr. of RPDO17 Communication parameter	unsigned8	ro	05
	1	COB-ID 1st RPDO Geflex Slave 8	unsigned32	rw	00000208+ID
	2	Trasmission type 1st RPDO Geflex Slave 8	unsigned8	rw	FD
	3	Inhibit time 1st RPDO Geflex Slave 8	unsigned16	rw	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 1st RPDO Geflex Slave 8	unsigned16	rw	0
1411	0	Nr. of RPDO18 Communication parameter	unsigned8	ro	05
	1	COB-ID 2nd RPDO Geflex Slave 8	unsigned32	rw	00000308+ID
	2	Trasmission type 2nd RPDO Geflex Slave 8	unsigned8	rw	FD
	3	Inhibit time 2nd RPDO Geflex Slave 8	unsigned16	rw	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 2nd RPDO Geflex Slave 8	unsigned16	rw	0
1412	0	Nr. of RPDO19 Communication parameter	unsigned8	ro	05
	1	COB-ID 1st RPDO Geflex Slave 9	unsigned32	rw	00000209+ID
	2	Trasmission type 1st RPDO Geflex Slave 9	unsigned8	rw	FD
	3	Inhibit time 1st RPDO Geflex Slave 9	unsigned16	rw	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 1st RPDO Geflex Slave 9	unsigned16	rw	0
1413	0	Nr. of RPDO20 Communication parameter	unsigned8	ro	05
	1	COB-ID 2nd RPDO Geflex Slave 9	unsigned32	rw	00000309+ID
	2	Trasmission type 2nd RPDO Geflex Slave 9	unsigned8	rw	FD
	3	Inhibit time 2nd RPDO Geflex Slave 9	unsigned16	rw	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 2nd RPDO Geflex Slave 9	unsigned16	rw	0
1414	0	Nr. of RPD021 Communication parameter	unsigned8	ro	05
	1	COB-ID 1st RPDO Geflex Slave 10	unsigned32	rw	0000020A+ID
	2	Trasmission type 1st RPDO Geflex Slave 10	unsigned8	rw	FD
	3	Inhibit time 1st RPDO Geflex Slave 10	unsigned16	rw	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 1st RPDO Geflex Slave 10	unsigned16	rw	0
1415	0	Nr. of RPD022 Communication parameter	unsigned8	ro	05
	1	COB-ID 2nd RPDO Geflex Slave 10	unsigned32	rw	0000030A+ID
	2	Trasmission type 2nd RPDO Geflex Slave 10	unsigned8	rw	FD
	3	Inhibit time 2nd RPDO Geflex Slave 10	unsigned16	rw	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 2nd RPDO Geflex Slave 10	unsigned16	rw	0

INDEX (hex)	SUB INDEX	DESCRIPTION	DATA TYPE	ACC.	DEFAULT (hex)
1416	0	Nr. of RPD023 Communication parameter	unsigned8	ro	05
	1	COB-ID 1st RPDO Geflex Slave 11	unsigned32	rw	0000020B+ID
	2	Trasmission type 1st RPDO Geflex Slave 11	unsigned8	rw	FD
	3	Inhibit time 1st RPDO Geflex Slave 11	unsigned16	rw	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 1st RPDO Geflex Slave 11	unsigned16	rw	0
1417	0	Nr. of RPD024 Communication parameter	unsigned8	ro	05
	1	COB-ID 2nd RPDO Geflex Slave 11	unsigned32	rw	0000030B+ID
	2	Trasmission type 2nd RPDO Geflex Slave 11	unsigned8	rw	FD
	3	Inhibit time 2nd RPDO Geflex Slave 11	unsigned16	rw	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 2nd RPDOGeflex Slave 11	unsigned16	rw	0
1418	0	Nr. of RPD025 Communication parameter	unsigned8	ro	05
	1	COB-ID 1st RPDO Geflex Slave 12	unsigned32	rw	0000020C+ID
	2	Trasmission type 1st RPDO Geflex Slave 12	unsigned8	rw	FD
	3	Inhibit time 1st RPDO Geflex Slave 12	unsigned16	rw	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 1st RPDO Geflex Slave 12	unsigned16	rw	0
1419	0	Nr. of RPD026 Communication parameter	unsigned8	ro	05
	1	COB-ID 2nd RPDO Geflex Slave 12	unsigned32	rw	0000030C+ID
	2	Trasmission type 2nd RPDO Geflex Slave 12	unsigned8	rw	FD
	3	Inhibit time 2nd RPDO Geflex Slave 12	unsigned16	rw	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 2nd RPDO Geflex Slave 12	unsigned16	rw	0
141A	0	Nr. of RPD027 Communication parameter	unsigned8	ro	05
	1	COB-ID 1st RPDO Geflex Slave 13	unsigned32	rw	0000020D+ID
	2	Trasmission type 1st RPDO Geflex Slave 13	unsigned8	rw	FD
	3	Inhibit time 1st RPDO Geflex Slave 13	unsigned16	rw	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 1st RPDO Geflex Slave 13	unsigned16	rw	0
141B	0	Nr. of RPD028 Communication parameter	unsigned8	ro	05
	1	COB-ID 2nd RPDO Geflex Slave 13	unsigned32	rw	0000030D+ID
	2	Trasmission type 2nd RPDO Geflex Slave 13	unsigned8	rw	FD
	3	Inhibit time 2nd RPDO Geflex Slave 13	unsigned16	rw	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 2nd RPDO Geflex Slave 13	unsigned16	rw	0
141C	0	Nr. of RPD029 Communication parameter	unsigned8	ro	05
	1	COB-ID 1st RPDO Geflex Slave 14	unsigned32	rw	0000020E+ID
	2	Trasmission type 1st RPDO Geflex Slave 14	unsigned8	rw	FD
	3	Inhibit time 1st RPDO Geflex Slave 14	unsigned16	rw	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 1st RPDO Geflex Slave 14	unsigned16	rw	0
141D	0	Nr. of RPD030 Communication parameter	unsigned8	ro	05
	1	COB-ID 2nd RPDO Geflex Slave 14	unsigned32	rw	0000030E+ID
	2	Trasmission type 2nd RPDO Geflex Slave 14	unsigned8	rw	FD
	3	Inhibit time 2nd RPDO Geflex Slave 14	unsigned16	rw	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 2nd RPDO Geflex Slave 14	unsigned16	rw	0

INDEX (hex)	SUB INDEX	DESCRIPTION	DATA TYPE	ACC.	DEFAULT (hex)
141E	0	Nr. of RPD031 Communication parameter	unsigned8	ro	05
	1	COB-ID 1st RPDO Geflex Slave 15	unsigned32	rw	0000020F+ID
	2	Trasmission type 1st RPDO Geflex Slave 15	unsigned8	rw	FD
	3	Inhibit time 1st RPDO Geflex Slave 15	unsigned16	rw	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 1st RPDO Geflex Slave 15	unsigned16	rw	0
141F	0	Nr. of RPD032 Communication parameter	unsigned8	ro	05
	1	COB-ID 2nd RPDO Geflex Slave 15	unsigned32	rw	0000030F+ID
	2	Trasmission type 2nd RPDO Geflex Slave 15	unsigned8	rw	FD
	3	Inhibit time 2nd RPDO Geflex Slave 15	unsigned16	rw	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 2nd RPDO Geflex Slave 15	unsigned16	rw	0
1600	0	Nr. of RPDO1 Mapping parameter	unsigned8	ro	02
	1	1st object mapped for 1st RPDO Geflex Master	unsigned32	ro	750A0110
	2	2nd object mapped for 1st RPDO Geflex Master	unsigned32	ro	751A0110
1601	0	Nr. of RPDO2 Mapping parameter	unsigned8	ro	03
	1	1st object mapped for 2nd RPDO Geflex Master	unsigned32	ro	74020110
	2	2nd object mapped for 2nd RPDO Geflex Master	unsigned32	ro	64120110
	3	3nd object mapped for 2nd RPDO Geflex Master	unsigned32	ro	64250110
1602	0	Nr. of RPDO3 Mapping parameter	unsigned8	ro	02
	1	1st object mapped for 1st RPDO Geflex Slave1	unsigned32	ro	750A0210
	2	2nd object mapped for 1st RPDO Geflex Slave 1	unsigned32	ro	751A0210
1603	0	Nr. of RPDO4 Mapping parameter	unsigned8	ro	03
	1	1st object mapped for 2nd RPDO Geflex Slave 1	unsigned32	ro	74020210
	2	2nd object mapped for 2nd RPDO Geflex Slave 1	unsigned32	ro	64120210
	3	3nd object mapped for 2nd RPDO Geflex Slave 1	unsigned32	ro	64250210
1604	0	Nr. of RPDO5Mapping parameter	unsigned8	ro	02
	1	1st object mapped for 1st RPDO Geflex Slave 2	unsigned32	ro	750A0310
	2	2nd object mapped for 1st RPDO Geflex Slave 2	unsigned32	ro	751A0310
1605	0	Nr. of RPDO6 Mapping parameter	unsigned8	ro	03
	1	1st object mapped for 2nd RPDO Geflex Slave 2	unsigned32	ro	74020310
	2	2nd object mapped for 2nd RPDO Geflex Slave 2	unsigned32	ro	64120310
	3	3nd object mapped for 2nd RPDO Geflex Slave 2	unsigned32	ro	64250310
1606	0	Nr. of RPDO7 Mapping parameter	unsigned8	ro	02
	1	1st object mapped for 1st RPDO Geflex Slave 3	unsigned32	ro	750A0410
	2	2nd object mapped for 1st RPDO Geflex Slave 3	unsigned32	ro	751A0410
1607	0	Nr. of RPDO8 Mapping parameter	unsigned8	ro	03
	1	1st object mapped for 2nd RPDO Geflex Slave 3	unsigned32	ro	74020410
	2	2nd object mapped for 2nd RPDO Geflex Slave 3	unsigned32	ro	64120410
	3	3nd object mapped for 2nd RPDO Geflex Slave 3	unsigned32	ro	64250410
1608	0	Nr. of RPDO9 Mapping parameter	unsigned8	ro	02
	1	1st object mapped for 1st RPDO Geflex Slave 4	unsigned32	ro	750A0510
	2	2nd object mapped for 1st RPDO Geflex Slave 4	unsigned32	ro	751A0510
1609	0	Nr. of RPDO10 Mapping parameter	unsigned8	ro	03
	1	1st object mapped for 2nd RPDO Geflex Slave 4	unsigned32	ro	74020510
	2	2nd object mapped for 2nd RPDO Geflex Slave 4	unsigned32	ro	64120510
	3	3nd object mapped for 2nd RPDO Geflex Slave 4	unsigned32	ro	64250510

INDEX (hex)	SUB INDEX	DESCRIPTION	DATA TYPE	ACC.	DEFAULT (hex)
160A	0	Nr. of RPDO11 Mapping parameter	unsigned8	ro	02
	1	1st object mapped for 1st RPDO Geflex Slave 5	unsigned32	ro	750A0610
	2	2nd object mapped for 1st RPDO Geflex Slave 5	unsigned32	ro	751A0610
160B	0	Nr. of RPDO12 Mapping parameter	unsigned8	ro	03
	1	1st object mapped for 2nd RPDO Geflex Slave 5	unsigned32	ro	74020610
	2	2nd object mapped for 2nd RPDO Geflex Slave 5	unsigned32	ro	64120610
	3	3nd object mapped for 2nd RPDO Geflex Slave 5	unsigned32	ro	64250610
160C	0	Nr. of RPDO13 Mapping parameter	unsigned8	ro	02
	1	1st object mapped for 1st RPDO Geflex Slave 6	unsigned32	ro	750A0710
	2	2nd object mapped for 1st RPDO Geflex Slave 6	unsigned32	ro	751A0710
160D	0	Nr. of RPDO14 Mapping parameter	unsigned8	ro	03
	1	1st object mapped for 2nd RPDO Geflex Slave 6	unsigned32	ro	74020710
	2	2nd object mapped for 2nd RPDO Geflex Slave 6	unsigned32	ro	64120710
	3	3nd object mapped for 2nd RPDO Geflex Slave 6	unsigned32	ro	64250710
160E	0	Nr. of RPDO15 Mapping parameter	unsigned8	ro	02
	1	1st object mapped for 1st RPDO Geflex Slave 7	unsigned32	ro	750A0810
	2	2nd object mapped for 1st RPDO Geflex Slave 7	unsigned32	ro	751A0810
160F	0	Nr. of RPDO16 Mapping parameter	unsigned8	ro	03
	1	1st object mapped for 2nd RPDO Geflex Slave 7	unsigned32	ro	74020810
	2	2nd object mapped for 2nd RPDO Geflex Slave 7	unsigned32	ro	64120810
	3	3nd object mapped for 2nd RPDO Geflex Slave 7	unsigned32	ro	64250810
1610	0	Nr. of RPDO17 Mapping parameter	unsigned8	ro	02
	1	1st object mapped for 1st RPDO Geflex Slave 8	unsigned32	ro	750A0910
	2	2nd object mapped for 1st RPDO Geflex Slave 8	unsigned32	ro	751A0910
1611	0	Nr. of RPDO18 Mapping parameter	unsigned8	ro	03
	1	1st object mapped for 2nd RPDO Geflex Slave 8	unsigned32	ro	74020910
	2	2nd object mapped for 2nd RPDO Geflex Slave 8	unsigned32	ro	64120910
	3	3nd object mapped for 2nd RPDO Geflex Slave 8	unsigned32	ro	64250910
1612	0	Nr. of RPDO19 Mapping parameter	unsigned8	ro	02
	1	1st object mapped for 1st RPDO Geflex Slave 9	unsigned32	ro	750A0A10
	2	2nd object mapped for 1st RPDO Geflex Slave 9	unsigned32	ro	751A0A10
1613	0	Nr. of RPDO20 Mapping parameter	unsigned8	ro	03
	1	1st object mapped for 2nd RPDO Geflex Slave 9	unsigned32	ro	74020A10
	2	2nd object mapped for 2nd RPDO Geflex Slave 9	unsigned32	ro	64120A10
	3	3nd object mapped for 2nd RPDO Geflex Slave 9	unsigned32	ro	64250A10
1614	0	Nr. of RPDO21 Mapping parameter	unsigned8	ro	02
	1	1st object mapped for 1st RPDO Geflex Slave 10	unsigned32	ro	750A0B10
	2	2nd object mapped for 1st RPDO Geflex Slave 10	unsigned32	ro	751A0B10
1615	0	Nr. of RPDO22 Mapping parameter	unsigned8	ro	03
	1	1st object mapped for 2nd RPDO Geflex Slave 10	unsigned32	ro	74020B10
	2	2nd object mapped for 2nd RPDO Geflex Slave 10	unsigned32	ro	64120B10
	3	3nd object mapped for 2nd RPDO Geflex Slave 10	unsigned32	ro	64250B10
1616	0	Nr. of RPDO23 Mapping parameter	unsigned8	ro	02
	1	1st object mapped for 1st RPDO Geflex Slave 11	unsigned32	ro	750A0C10
	2	2nd object mapped for 1st RPDO Geflex Slave 11	unsigned32	ro	751A0C10

INDEX (hex)	SUB INDEX	DESCRIPTION	DATA TYPE	ACC.	DEFAULT (hex)
1617	0	Nr. of RPDO24 Mapping parameter	unsigned8	ro	03
	1	1st object mapped for 2nd RPDO Geflex Slave 11	unsigned32	ro	74020C10
	2	2nd object mapped for 2nd RPDO Geflex Slave 11	unsigned32	ro	64120C10
	3	3nd object mapped for 2nd RPDO Geflex Slave 11	unsigned32	ro	64250C10
1618	0	Nr. of RPDO25 Mapping parameter	unsigned8	ro	02
	1	1st object mapped for 1st RPDO Geflex Slave 12	unsigned32	ro	750A0D10
	2	2nd object mapped for 1st RPDO Geflex Slave 12	unsigned32	ro	751A0D10
1619	0	Nr. of RPDO26 Mapping parameter	unsigned8	ro	03
	1	1st object mapped for 2nd RPDO Geflex Slave 12	unsigned32	ro	74020D10
	2	2nd object mapped for 2nd RPDO Geflex Slave 12	unsigned32	ro	64120D10
	3	3nd object mapped for 2nd RPDO Geflex Slave 12	unsigned32	ro	64250D10
161A	0	Nr. of RPDO27 Mapping parameter	unsigned8	ro	02
	1	1st object mapped for 2nd RPDO Geflex Slave 13	unsigned32	ro	750A0E10
	2	2nd object mapped for 2nd RPDO Geflex Slave 13	unsigned32	ro	751A0E10
161B	0	Nr. of RPDO28 Mapping parameter	unsigned8	ro	03
	1	1st object mapped for 2nd RPDO Geflex Slave 13	unsigned32	ro	74020E10
	2	2nd object mapped for 2nd RPDO Geflex Slave 13	unsigned32	ro	64120E10
	3	3nd object mapped for 2nd RPDO Geflex Slave 13	unsigned32	ro	64250E10
161C	0	Nr. of RPDO29 Mapping parameter	unsigned8	ro	02
	1	1st object mapped for 2nd RPDO Geflex Slave 14	unsigned32	ro	750A0F10
	2	2nd object mapped for 2nd RPDO Geflex Slave 14	unsigned32	ro	751A0F10
161D	0	Nr. of RPDO30 Mapping parameter	unsigned8	ro	03
	1	1st object mapped for 2nd RPDO Geflex Slave 14	unsigned32	ro	74020F10
	2	2nd object mapped for 2nd RPDO Geflex Slave 14	unsigned32	ro	64120F10
	3	3nd object mapped for 2nd RPDO Geflex Slave 14	unsigned32	ro	64250F10
161E	0	Nr. of RPDO31 Mapping parameter	unsigned8	ro	02
	1	1st object mapped for 2nd RPDO Geflex Slave 15	unsigned32	ro	750A1010
	2	2nd object mapped for 2nd RPDO Geflex Slave 15	unsigned32	ro	751A1010
161F	0	Nr. of RPDO32 Mapping parameter	unsigned8	ro	03
	1	1st object mapped for 2nd RPDO Geflex Slave 15	unsigned32	ro	74021010
	2	2nd object mapped for 2nd RPDO Geflex Slave 15	unsigned32	ro	64121010
	3	3nd object mapped for 2nd RPDO Geflex Slave 15	unsigned32	ro	64251010
1800	0	Nr. of TPDO1 Communication parameter	unsigned8	ro	05
	1	COB-ID 1st TPDO Geflex Master	unsigned32	rw	00000180+ID
	2	Transmission type 1st TPDO Geflex Master	unsigned8	rw	FF
	3	Inhibit time 1st TPDO Geflex Master	unsigned16	ro	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 1st TPDO1 Geflex Master	unsigned16	rw	03E8
1801	0	Nr of TPDO2 Communication parameter	unsigned8	ro	05
	1	COB-ID 2nd TPDO Geflex Master	unsigned32	rw	00000280+ID
	2	Trasmission type 2nd TPDO Geflex Master	unsigned8	rw	FF
	3	Inhibit time 2nd TPDO Geflex Master	unsigned16	ro	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 2nd TPDO Geflex Master	unsigned16	rw	03E8

INDEX (hex)	SUB INDEX	DESCRIPTION	DATA TYPE	ACC.	DEFAULT (hex)
1802	0	Nr. of TPDO3 Communication parameter	unsigned8	ro	05
	1	COB-ID 1st TPDO Geflex Slave 1	unsigned32	rw	00000181+ID
	2	Trasmission type 1st TPDO Geflex Slave 1	unsigned8	rw	FF
	3	Inhibit time 1st TPDO Geflex Slave 1	unsigned16	ro	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 1st TPDO Geflex Slave 1	unsigned16	rw	03E8
1803	0	Nr of TPDO4 Communication parameter	unsigned8	ro	05
	1	COB-ID 2nd TPDO Geflex Slave 1	unsigned32	rw	00000281+ID
	2	Trasmission type 2nd TPDO Geflex Slave 1	unsigned8	rw	FF
	3	Inhibit time 2nd TPDO Geflex Slave 1	unsigned16	ro	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 2nd TPDO Geflex Slave 1	unsigned16	rw	03E8
1804	0	Nr. of TPDO5 Communication parameter	unsigned8	ro	05
	1	COB-ID 1st TPDO Geflex Slave 2	unsigned32	rw	00000182+ID
	2	Trasmission type 1st TPDO Geflex Slave 2	unsigned8	rw	FF
	3	Inhibit time 1st TPDO Geflex Slave 2	unsigned16	ro	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 1st TPDO Geflex Slave 2	unsigned16	rw	03E8
1805	0	Nr. of TPDO6 Communication parameter	unsigned8	ro	05
	1	COB-ID 2nd TPDO Geflex Slave 2	unsigned32	rw	00000282+ID
	2	Trasmission type 2nd TPDO Geflex Slave 2	unsigned8	rw	FF
	3	Inhibit time 2nd TPDO Geflex Slave 2	unsigned16	ro	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 2nd TPDO Geflex Slave 2	unsigned16	rw	03E8
1806	0	Nr. of TPDO7 Communication parameter	unsigned8	ro	05r
	1	COB-ID 1st TPDO Geflex Slave 3	unsigned32	rw	00000183+ID
	2	Trasmission type 1st TPDO Geflex Slave 3	unsigned8	rw	FF
	3	Inhibit time 1st TPDO Geflex Slave 3	unsigned16	ro	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 1st TPDO Geflex Slave 3	unsigned16	rw	03E8
1807	0	Nr of TPDO8 Communication parameter	unsigned8	ro	05
	1	COB-ID 2nd TPDO Geflex Slave 3	unsigned32	rw	00000283+ID
	2	Trasmission type 2nd TPDO Geflex Slave 3	unsigned8	rw	FF
	3	Inhibit time 2nd TPDO Geflex Slave 3	unsigned16	ro	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 2nd TPDO Geflex Slave 3	unsigned16	rw	03E8
1808	0	Nr of TPDO9 Communication parameter	unsigned8	ro	05
	1	COB-ID 1st TPDO Geflex Slave 4	unsigned32	rw	00000184+ID
	2	Trasmission type 1st TPDO Geflex Slave 4	unsigned8	rw	FF
	3	Inhibit time 1st TPDO Geflex Slave 4	unsigned16	ro	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 1st TPDO Geflex Slave 4	unsigned16	rw	03E8
1809	0	Nr of TPDO10 Communication parameter	unsigned8	ro	05
	1	COB-ID 2nd TPDO Geflex Slave 4	unsigned32	rw	00000284+ID
	2	Trasmission type 2nd TPDO Geflex Slave 4	unsigned8	rw	FF
	3	Inhibit time 2nd TPDO Geflex Slave 4	unsigned16	ro	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 2nd TPDO Geflex Slave 4	unsigned16	rw	03E8

INDEX (hex)	SUB INDEX	DESCRIPTION	DATA TYPE	ACC.	DEFAULT (hex)
180A	0	Nr of TPDO11 Communication parameter	unsigned8	ro	05
	1	COB-ID 1st TPDO Geflex Slave 5	unsigned32	rw	00000185+ID
	2	Trasmission type 1st TPDO Geflex Slave 5	unsigned8	rw	FF
	3	Inhibit time 1st TPDO Geflex Slave 5	unsigned16	ro	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 1st TPDO Geflex Slave 5	unsigned16	rw	03E8
180B	0	Nr of TPDO12 Communication parameter	unsigned8	ro	05
	1	COB-ID 2nd TPDO Geflex Slave 5	unsigned32	rw	00000285+ID
	2	Trasmission type 2nd TPDO Geflex Slave 5	unsigned8	rw	FF
	3	Inhibit time 2nd TPDO Geflex Slave 5	unsigned16	ro	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 2nd TPDO Geflex Slave 5	unsigned16	rw	03E8
180C	0	Nr of TPDO13 Communication parameter	unsigned8	ro	05
	1	COB-ID 1st TPDO Geflex Slave 6	unsigned32	rw	00000186+ID
	2	Trasmission type 1st TPDO Geflex Slave 6	unsigned8	rw	FF
	3	Inhibit time 1st TPDO Geflex Slave 6	unsigned16	ro	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 1st TPDO Geflex Slave 6	unsigned16	rw	03E8
180D	0	Nr of TPDO14 Communication parameter	unsigned8	ro	05
	1	COB-ID 2nd TPDO Geflex Slave 6	unsigned32	rw	00000286+ID
	2	Trasmission type 2nd TPDO Geflex Slave 6	unsigned8	rw	FF
	3	Inhibit time 2nd TPDO Geflex Slave 6	unsigned16	ro	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 2nd TPDO Geflex Slave 6	unsigned16	rw	03E8
180E	0	Nr of TPDO15 Communication parameter	unsigned8	ro	05
	1	COB-ID 1st TPDO Geflex Slave 7	unsigned32	rw	00000187+ID
	2	Trasmission type 1st TPDO Geflex Slave 7	unsigned8	rw	FF
	3	Inhibit time 1st TPDO Geflex Slave 7	unsigned16	ro	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 1st TPDO Geflex Slave 7	unsigned16	rw	03E8
180F	0	Nr of TPDO16 Communication parameter	unsigned8	ro	05
	1	COB-ID 2nd TPDO Geflex Slave 7	unsigned32	rw	00000287+ID
	2	Trasmission type 2nd TPDO Geflex Slave 7	unsigned8	rw	FF
	3	Inhibit time 2nd TPDO Geflex Slave 7	unsigned16	ro	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 2nd TPDO Geflex Slave 7	unsigned16	rw	03E8
1810	0	Nr of TPDO17 Communication parameter	unsigned8	ro	05
	1	COB-ID 1st TPDO Geflex Slave 8	unsigned32	rw	00000188+ID
	2	Trasmission type 1st TPDO Geflex Slave 8	unsigned8	rw	FF
	3	Inhibit time 1st TPDO Geflex Slave 8	unsigned16	ro	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 1st TPDO Geflex Slave 8	unsigned16	rw	03E8
1811	0	Nr of TPDO18 Communication parameter	unsigned8	ro	05
	1	COB-ID 2nd TPDO Geflex Slave 8	unsigned32	rw	00000288+ID
	2	Trasmission type 2nd TPDO Geflex Slave 8	unsigned8	rw	FF
	3	Inhibit time 2nd TPDO Geflex Slave 8	unsigned16	ro	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 2nd TPDO Geflex Slave 8	unsigned16	rw	03E8

INDEX (hex)	SUB INDEX	DESCRIPTION	DATA TYPE	ACC.	DEFAULT (hex)
180A	0	Nr of TPDO11 Communication parameter	unsigned8	ro	05
	1	COB-ID 1st TPDO Geflex Slave 5	unsigned32	rw	00000185+ID
	2	Trasmission type 1st TPDO Geflex Slave 5	unsigned8	rw	FF
	3	Inhibit time 1st TPDO Geflex Slave 5	unsigned16	ro	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 1st TPDO Geflex Slave 5	unsigned16	rw	03E8
180B	0	Nr of TPDO12 Communication parameter	unsigned8	ro	05
	1	COB-ID 2nd TPDO Geflex Slave 5	unsigned32	rw	00000285+ID
	2	Trasmission type 2nd TPDO Geflex Slave 5	unsigned8	rw	FF
	3	Inhibit time 2nd TPDO Geflex Slave 5	unsigned16	ro	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 2nd TPDO Geflex Slave 5	unsigned16	rw	03E8
180C	0	Nr of TPDO13 Communication parameter	unsigned8	ro	05
	1	COB-ID 1st TPDO Geflex Slave 6	unsigned32	rw	00000186+ID
	2	Trasmission type 1st TPDO Geflex Slave 6	unsigned8	rw	FF
	3	Inhibit time 1st TPDO Geflex Slave 6	unsigned16	ro	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 1st TPDO Geflex Slave 6	unsigned16	rw	03E8
180D	0	Nr of TPDO14 Communication parameter	unsigned8	ro	05
	1	COB-ID 2nd TPDO Geflex Slave 6	unsigned32	rw	00000286+ID
	2	Trasmission type 2nd TPDO Geflex Slave 6	unsigned8	rw	FF
	3	Inhibit time 2nd TPDO Geflex Slave 6	unsigned16	ro	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 2nd TPDO Geflex Slave 6	unsigned16	rw	03E8
180E	0	Nr of TPDO15 Communication parameter	unsigned8	ro	05
	1	COB-ID 1st TPDO Geflex Slave 7	unsigned32	rw	00000187+ID
	2	Trasmission type 1st TPDO Geflex Slave 7	unsigned8	rw	FF
	3	Inhibit time 1st TPDO Geflex Slave 7	unsigned16	ro	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 1st TPDO Geflex Slave 7	unsigned16	rw	03E8
180F	0	Nr of TPDO16 Communication parameter	unsigned8	ro	05
	1	COB-ID 2nd TPDO Geflex Slave 7	unsigned32	rw	00000287+ID
	2	Trasmission type 2nd TPDO Geflex Slave 7	unsigned8	rw	FF
	3	Inhibit time 2nd TPDO Geflex Slave 7	unsigned16	ro	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 2nd TPDO Geflex Slave 7	unsigned16	rw	03E8
1810	0	Nr of TPDO17 Communication parameter	unsigned8	ro	05
	1	COB-ID 1st TPDO Geflex Slave 8	unsigned32	rw	00000188+ID
	2	Trasmission type 1st TPDO Geflex Slave 8	unsigned8	rw	FF
	3	Inhibit time 1st TPDO Geflex Slave 8	unsigned16	ro	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 1st TPDO Geflex Slave 8	unsigned16	rw	03E8
1811	0	Nr of TPDO18 Communication parameter	unsigned8	ro	05
	1	COB-ID 2nd TPDO Geflex Slave 8	unsigned32	rw	00000288+ID
	2	Trasmission type 2nd TPDO Geflex Slave 8	unsigned8	rw	FF
	3	Inhibit time 2nd TPDO Geflex Slave 8	unsigned16	ro	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 2nd TPDO Geflex Slave 8	unsigned16	rw	03E8

INDEX (hex)	SUB INDEX	DESCRIPTION	DATA TYPE	ACC.	DEFAULT (hex)
1812	0	Nr of TPDO19 Communication parameter	unsigned8	ro	05
	1	COB-ID 1st TPDO Geflex Slave 9	unsigned32	rw	00000189+ID
	2	Trasmission type 1st TPDO Geflex Slave 9	unsigned8	rw	FF
	3	Inhibit time 1st TPDO Geflex Slave 9	unsigned16	ro	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 1st TPDO Geflex Slave 9	unsigned16	rw	03E8
1813	0	Nr of TPDO20 Communication parameter	unsigned8	ro	05
	1	COB-ID 2nd TPDO Geflex Slave 9	unsigned32	rw	00000289+ID
	2	Trasmission type 2nd TPDO Geflex Slave 9	unsigned8	rw	FF
	3	Inhibit time 2nd TPDO Geflex Slave 9	unsigned16	ro	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 2nd TPDO Geflex Slave 9	unsigned16	rw	03E8
1814	0	Nr of TPDO21 Communication parameter	unsigned8	ro	05
	1	COB-ID 1st TPDO Geflex Slave 10	unsigned32	rw	0000018A+ID
	2	Trasmission type 1st TPDO Geflex Slave 10	unsigned8	rw	FF
	3	Inhibit time 1st TPDO Geflex Slave 10	unsigned16	ro	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 1st TPDO Geflex Slave 10	unsigned16	rw	03E8
1815	0	Nr of TPDO22 Communication parameter	unsigned8	ro	05
	1	COB-ID 2nd TPDO Geflex Slave 10	unsigned32	rw	0000028A+ID
	2	Trasmission type 2nd TPDO Geflex Slave 10	unsigned8	rw	FF
	3	Inhibit time 2nd TPDO Geflex Slave 10	unsigned16	ro	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 2nd TPDO Geflex Slave 10	unsigned16	rw	03E8
1816	0	Nr of TPDO23 Communication parameter	unsigned8	ro	05
	1	COB-ID 1st TPDO Geflex Slave 11	unsigned32	rw	0000018B+ID
	2	Trasmission type 1st TPDO Geflex Slave 11	unsigned8	rw	FF
	3	Inhibit time 1st TPDO Geflex Slave 11	unsigned16	ro	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 1st TPDO Geflex Slave 11	unsigned16	rw	03E8
1817	0	Nr of TPDO24 Communication parameter	unsigned8	ro	05
	1	COB-ID 2nd TPDO Geflex Slave 11	unsigned32	rw	0000028B+ID
	2	Trasmission type 2nd TPDO Geflex Slave 11	unsigned8	rw	FF
	3	Inhibit time 2nd TPDO Geflex Slave 11	unsigned16	ro	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 2nd TPDO Geflex Slave 11	unsigned16	rw	03E8
1818	0	Nr of TPDO25 Communication parameter	unsigned8	ro	05
	1	COB-ID 1st TPDO Geflex Slave 12	unsigned32	rw	0000018C+ID
	2	Trasmission type 1st TPDO Geflex Slave 12	unsigned8	rw	FF
	3	Inhibit time 1st TPDO Geflex Slave 12	unsigned16	ro	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 1st TPDO Geflex Slave 12	unsigned16	rw	03E8
1819	0	Nr of TPDO26 Communication	unsigned8	ro	05
	1	COB-ID 2nd TPDO Geflex Slave 12	unsigned32	rw	0000028C+ID
	2	Trasmission type 2nd TPDO Geflex Slave 12	unsigned8	rw	FF
	3	Inhibit time 2nd TPDO Geflex Slave 12	unsigned16	ro	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 2nd TPDO Geflex Slave 12	unsigned16	rw	03E8

INDEX (hex)	SUB INDEX	DESCRIPTION	DATA TYPE	ACC.	DEFAULT (hex)
181A	0	Nr of TPDO27 Communication parameter	unsigned8	ro	05
	1	COB-ID 1st TPDO Geflex Slave 13	unsigned32	rw	0000018D+ID
	2	Trasmission type 1st TPDO Geflex Slave 13	unsigned8	rw	FF
	3	Inhibit time 1st TPDO Geflex Slave 13	unsigned16	ro	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 1st TPDO Geflex Slave 13	unsigned16	rw	03E8
181B	0	Nr of TPDO28 Communication parameter	unsigned8	ro	05
	1	COB-ID 2nd TPDO Geflex Slave 13	unsigned32	rw	0000028D+ID
	2	Trasmission type 2nd TPDO Geflex Slave 13	unsigned8	rw	FF
	3	Inhibit time 2nd TPDO Geflex Slave 13	unsigned16	ro	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 2nd TPDO Geflex Slave 13	unsigned16	rw	03E8
181C	0	Nr of TPDO29 Communication parameter	unsigned8	ro	05
	1	COB-ID 1st TPDO Geflex Slave 14	unsigned32	rw	0000018E+ID
	2	Trasmission type 1st TPDO Geflex Slave 14	unsigned8	rw	FF
	3	Inhibit time 1st TPDO Geflex Slave 14	unsigned16	ro	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 1st TPDO Geflex Slave 14	unsigned16	rw	03E8
181D	0	Nr of TPDO30 Communication parameter	unsigned8	ro	05
	1	COB-ID 2nd TPDO Geflex Slave 14	unsigned32	rw	0000028E+ID
	2	Trasmission type 2nd TPDO Geflex Slave 14	unsigned8	rw	FF
	3	Inhibit time 2nd TPDO Geflex Slave 14	unsigned16	ro	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 2nd TPDO Geflex Slave 14	unsigned16	rw	03E8
181E	0	Nr of TPDO31 Communication parameter	unsigned8	ro	05
	1	COB-ID 1st TPDO Geflex Slave 15	unsigned32	rw	0000018F+ID
	2	Trasmission type 1st TPDO Geflex Slave 15	unsigned8	rw	FF
	3	Inhibit time 1st TPDO Geflex Slave 15	unsigned16	ro	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 1st TPDO Geflex Slave 15	unsigned16	rw	03E8
181F	0	Nr of TPDO20 Communication parameter	unsigned8	ro	05
	1	COB-ID 2nd TPDO Geflex Slave 15	unsigned32	rw	0000028F+ID
	2	Trasmission type 2nd TPDO Geflex Slave 15	unsigned8	rw	FF
	3	Inhibit time 2nd TPDO Geflex Slave 15	unsigned16	ro	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 2nd TPDO Geflex Slave 15	unsigned16	rw	03E8
1A00	0	Number of TPDO1 Mapping parameter	unsigned8	ro	03
	1	1st object mapped for 1st TPDO Geflex Master	unsigned32	ro	71300110
	2	2nd object mapped for 1st TPDO Geflex Master	unsigned32	ro	20000110
	3	3st object mapped for 1st TPDO Geflex Master	unsigned32	ro	66000108
1A01	0	Number of TPDO2 Mapping parameter	unsigned8	ro	03
	1	1st object mapped for 2nd TPDO Geflex Master	unsigned32	ro	64100110
	2	2nd object mapped for 2nd TPDO Geflex Master	unsigned32	ro	74000110
	3	3st object mapped for 2nd TPDO Geflex Master	unsigned32	ro	66000108
1A02	0	Number of TPDO3 Mapping parameter	unsigned8	ro	03
	1	1st object mapped for 1st TPDO Geflex Slave 1	unsigned32	ro	71300210
	2	2nd object mapped for 1st TPDO Geflex Slave 1	unsigned32	ro	20000210
	3	3st object mapped for 1st TPDO Geflex Slave 1	unsigned32	ro	66000208

INDEX (hex)	SUB INDEX	DESCRIPTION	DATA TYPE	ACC.	DEFAULT (hex)
1A03	0	Number of TPDO4 Mapping parameter	unsigned8	ro	03
	1	1st object mapped for 2nd TPDO Geflex Slave 1	unsigned32	ro	64100210
	2	2nd object mapped for 2nd TPDO Geflex Slave 1	unsigned32	ro	74000210
	3	3st object mapped for 2nd TPDO Geflex Slave 1	unsigned32	ro	66000208
1A04	0	Number of TPDO5 Mapping parameter	unsigned8	ro	03
	1	1st object mapped for 1st TPDO Geflex Slave 2	unsigned32	ro	71300310
	2	2nd object mapped for 1st TPDO Geflex Slave 2	unsigned32	ro	20000310
	3	3st object mapped for 1st TPDO Geflex Slave 2	unsigned32	ro	66000308
1A05	0	Number of TPDO6 Mapping parameter	unsigned8	ro	03
	1	1st object mapped for 2nd TPDO Geflex Slave 2	unsigned32	ro	64100310
	2	2nd object mapped for 2nd TPDO Geflex Slave 2	unsigned32	ro	74000310
	3	3st object mapped for 2nd TPDO Geflex Slave 2	unsigned32	ro	66000308
1A06	0	Number of TPDO7 Mapping parameter	unsigned8	ro	03
	1	1st object mapped for 1st TPDO Geflex Slave 3	unsigned32	ro	71300410
	2	2nd object mapped for 1st TPDO Geflex Slave 3	unsigned32	ro	20000410
	3	3st object mapped for 1st TPDO Geflex Slave 3	unsigned32	ro	66000408
1A07	0	Nr of TPDO8 Mapping parameter	unsigned8	ro	03
	1	1st object mapped for 2nd TPDO Geflex Slave 3	unsigned32	ro	64100410
	2	2nd object mapped for 2nd TPDO Geflex Slave 3	unsigned32	ro	74000410
	3	3st object mapped for 2nd TPDO Geflex Slave 3	unsigned32	ro	66000408
1A08	0	Number of TPDO9 Mapping parameter	unsigned8	ro	03
	1	1st object mapped for 1st TPDO Geflex Slave 4	unsigned32	ro	71300510
	2	2nd object mapped for 1st TPDO Geflex Slave 4	unsigned32	ro	20000510
	3	3st object mapped for 1st TPDO Geflex Slave 4	unsigned32	ro	66000508
1A09	0	Number of TPDO10 Mapping parameter	unsigned8	ro	03
	1	1st object mapped for 2nd TPDO Geflex Slave 4	unsigned32	ro	64100510
	2	2nd object mapped for 2nd TPDO Geflex Slave 4	unsigned32	ro	74000510
	3	3st object mapped for 2nd TPDO Geflex Slave 4	unsigned32	ro	66000508
1A0A	0	Number of TPDO11 Mapping parameter	unsigned8	ro	03
	1	1st object mapped fo 1st TPDO Geflex Slave 5	unsigned32	ro	71300610
	2	2nd object mapped for 1st TPDO Geflex Slave 5	unsigned32	ro	20000610
	3	3st object mapped for 1st TPDO Geflex Slave 5	unsigned32	ro	66000608
1A0B	0	Number of TPDO12 Mapping parameter	unsigned8	ro	03
	1	1st object mapped for 2nd TPDO Geflex Slave 5	unsigned32	ro	64100610
	2	2nd object mapped for 2nd TPDO Geflex Slave 5	unsigned32	ro	74000610
	3	3st object mapped for 2nd TPDO Geflex Slave 5	unsigned32	ro	66000608
1A0C	0	Number of TPDO13 Mapping parameter	unsigned8	ro	03
	1	1st object mapped for 1st TPDO Geflex Slave 6	unsigned32	ro	71300710
	2	2nd object mapped for 1st TPDO Geflex Slave 6	unsigned32	ro	20000710
	3	3st object mapped for 1st TPDO Geflex Slave 6	unsigned32	ro	66000708
1A0D	0	Number of TPDO14 Mapping parameter	unsigned8	ro	03
	1	1st object mapped for 2nd TPDO Geflex Slave 6	unsigned32	ro	64100710
	2	2nd object mapped for 2nd TPDO Geflex Slave 6	unsigned32	ro	74000710
	3	3st object mapped for 2nd TPDO Geflex Slave 6	unsigned32	ro	66000708
1A0E	0	Nr of TPDO15 Mapping parameter	unsigned8	ro	03
	1	1st object mapped for 1st TPDO Geflex Slave 7	unsigned32	ro	71300810
	2	2nd object mapped for 1st TPDO Geflex Slave 7	unsigned32	ro	20000810
	3	3st object mapped for 1st TPDO Geflex Slave 7	unsigned32	ro	66000808

INDEX (hex)	SUB INDEX	DESCRIPTION	DATA TYPE	ACC.	DEFAULT (hex)
1A0F	0	Number of TPDO16 Mapping parameter	unsigned8	ro	03
	1	1st object mapped for 2nd TPDO Geflex Slave 7	unsigned32	ro	64100810
	2	2nd object mapped for 2nd TPDO Geflex Slave 7	unsigned32	ro	74000810
	3	3st object mapped for 2nd TPDO Geflex Slave 7	unsigned32	ro	66000808
1A10	0	Number of TPDO17 Mapping parameter	unsigned8	ro	03
	1	1st object mapped for 1st TPDO Geflex Slave 8	unsigned32	ro	71300910
	2	2nd object mapped for 1st TPDO Geflex Slave 8	unsigned32	ro	20000910
	3	3st object mapped for 1st TPDO Geflex Slave 8	unsigned32	ro	66000908
1A11	0	Number of TPDO18 Mapping parameter	unsigned8	ro	03
	1	1st object mapped for 2nd TPDO Geflex Slave 8	unsigned32	ro	64100910
	2	2nd object mapped for 2nd TPDO Geflex Slave 8	unsigned32	ro	74000910
	3	3st object mapped for 2nd TPDO Geflex Slave 8	unsigned32	ro	66000908
1A12	0	Number of TPDO19 Mapping parameter	unsigned8	ro	03
	1	1st object mapped for 1st TPDO Geflex Slave 9	unsigned32	ro	71300A10
	2	2nd object mapped for 1st TPDO Geflex Slave 9	unsigned32	ro	20000A10
	3	3st object mapped for 1st TPDO Geflex Slave 9	unsigned32	ro	66000A08
1A13	0	Number of TPDO20 Mapping parameter	unsigned8	ro	03
	1	1st object mapped for 2nd TPDO Geflex Slave 9	unsigned32	ro	64100A10
	2	2nd object mapped for 2nd TPDO Geflex Slave 9	unsigned32	ro	74000A10
	3	3st object mapped for 2nd TPDO Geflex Slave 9	unsigned32	ro	66000A08
1A14	0	Number of TPDO21 Mapping parameter	unsigned8	ro	03
	1	1st object mapped for 1st TPDO Geflex Slave 10	unsigned32	ro	71300B10
	2	2nd object mapped for 1st TPDO Geflex Slave 10	unsigned32	ro	20000B10
	3	3st object mapped for 1st TPDO Geflex Slave 10	unsigned32	ro	66000B08
1A15	0	Number of TPDO22 Mapping parameter	unsigned8	ro	03
	1	1st object mapped for 2nd TPDO Geflex Slave 10	unsigned32	ro	64100B10
	2	2nd object mapped for 2nd TPDO Geflex Slave 10	unsigned32	ro	74000B10
	3	3st object mapped for 2nd TPDO Geflex Slave 10	unsigned32	ro	66000B08
1A16	0	Number of TPDO23 Mapping parameter	unsigned8	ro	03
	1	1st object mapped for 1st TPDO Geflex Slave 11	unsigned32	ro	71300C10
	2	2nd object mapped for 1st TPDO Geflex Slave 11	unsigned32	ro	20000C10
	3	3st object mapped for 1st TPDO Geflex Slave 11	unsigned32	ro	66000C08
1A17	0	Number of TPDO24 Mapping parameter	unsigned8	ro	03
	1	1st object mapped for 2nd TPDO Geflex Slave 11	unsigned32	ro	64100C10
	2	2nd object mapped for 2nd TPDO Geflex Slave 11	unsigned32	ro	74000C10
	3	3st object mapped for 2nd TPDO Geflex Slave 11	unsigned32	ro	66000C08
1A18	0	Number of TPDO25 Mapping parameter	unsigned8	ro	03
	1	1st object mapped for 1st TPDO Geflex Slave 12	unsigned32	ro	71300D10
	2	2nd object mapped for 1st TPDO Geflex Slave 12	unsigned32	ro	20000D10
	3	3st object mapped for 1st TPDO Geflex Slave 12	unsigned32	ro	66000D08
1A19	0	Number of TPDO26 Mapping parameter	unsigned8	ro	03
	1	1st object mapped for 2nd TPDO Geflex Slave 12	unsigned32	ro	64100D10
	2	2nd object mapped for 2nd TPDO Geflex Slave 12	unsigned32	ro	74000D10
	3	3st object mapped for 2nd TPDO Geflex Slave 12	unsigned32	ro	66000D08
1A1A	0	Number of TPDO27 Mapping parameter	unsigned8	ro	03
	1	1st object mapped for 1st TPDO Geflex Slave 13	unsigned32	ro	71300E10
	2	2nd object mapped for 1st TPDO Geflex Slave 13	unsigned32	ro	20000E10
	3	3st object mapped for 1st TPDO Geflex Slave 13	unsigned32	ro	66000E08

INDEX (hex)	SUB INDEX	DESCRIPTION	DATA TYPE	ACC.	DEFAULT (hex)
1A1B	0	Number of TPDO28 Mapping parameter	unsigned8	ro	03
	1	1st object mapped for 2nd TPDO Geflex Slave 13	unsigned32	ro	64100E10
	2	2nd object mapped for 2nd TPDO Geflex Slave 13	unsigned32	ro	74000E10
	3	3st object mapped for 2nd TPDO Geflex Slave 13	unsigned32	ro	66000E08
1A1C	0	Number of TPDO29 Mapping parameter	unsigned8	ro	03
	1	1st object mapped for 1st TPDO Geflex Slave 14	unsigned32	ro	71300F10
	2	2nd object mapped for 1st TPDO Geflex Slave 14	unsigned32	ro	20000F10
	3	3st object mapped for 1st TPDO Geflex Slave 14	unsigned32	ro	66000F08
1A1D	0	Number of TPDO30 Mapping parameter	unsigned8	ro	03
	1	1st object mapped for 2nd TPDO Geflex Slave 14	unsigned32	ro	64100F10
	2	2nd object mapped for 2nd TPDO Geflex Slave 14	unsigned32	ro	74000F10
	3	3st object mapped for 2nd TPDO Geflex Slave 14	unsigned32	ro	66000F08
1A1E	0	Number of TPDO31 Mapping parameter	unsigned8	ro	03
	1	1st object mapped for 1st TPDO Geflex Slave 15	unsigned32	ro	71301010
	2	2nd object mapped for 1st TPDO Geflex Slave 15	unsigned32	ro	20001010
	3	3st object mapped for 1st TPDO Geflex Slave 15	unsigned32	ro	66001008
1A1F	0	Number of TPDO32 Mapping parameter	unsigned8	ro	03
	1	1st object mapped for 2nd TPDO Geflex Slave 15	unsigned32	ro	64101010
	2	2nd object mapped for 2nd TPDO Geflex Slave 15	unsigned32	ro	74001010
	3	3st object mapped for 2nd TPDO Geflex Slave 15	unsigned32	ro	66001008

SUB-INDEX “n” identifies the GFX4 pertaining to that CANopen node
(ex. 1(dec) = zone 1 ,..., 16(dec) = zone 16).

DEVICE AND MANUFACTURER PROFILE CANopen		GFX4_C06.EDS				GFX4 MODBUS	
INDEX (hex)	SUB INDEX	DESCRIPTION	DATA	ACC.	DEFAULT (hex)	FUNCTION	ADD. (dec)
		bit controle					
6421	n	Controller in manual	boolean	rw	0	Auto/Man	1
6424	n	Start Selftuning	boolean	rw	0	Selftuning	3
2232	n	Software off	boolean	rw	0	OFF	11
2005	n	Autotuning on	boolean	rw	0	Autotuning	29
2006	n	Enable remote Setpoint	boolean	rw	0	Loc/Rem	10
6420	n	SP1/SP2 selection	boolean	rw	0	SP1/SP2	75
650D	n	Alarm 1 active	boolean	ro	0	Status AL1	4
651D	n	Alarm 2 active	boolean	ro	0	Status AL2	5
652D	n	Alarm 3 active	boolean	ro	0	Status AL3	62
653D	n	Alarm 4 active	boolean	ro	0	Status AL4	69
2008	n	Alarm LBA active	boolean	ro	0	Status LBA	8
2007	n	Alarm HB active	boolean	ro	0	Status HB	26
2009	n	Output 1 active	boolean	ro	0	Status rL.1	12
200A	n	Output 2 active	boolean	ro	0	Status rL.2	13
200B	n	Output 3 active	boolean	ro	0	Status rL.3	14
200C	n	Output 4 active	boolean	ro	0	Status rL.4	15
200D	n	Output 5 active	boolean	ro	0	Status rL.5	16
200E	n	Output 6 active	boolean	ro	0	Status rL.6	17
2010	n	Selftuning active	boolean	ro	0	Status Selftuning	0
2011	n	Autotuning active	boolean	ro	0	Status Autotuning	28
2012	n	Softstart active	boolean	ro	0	Status Softstart	63
2013	n	Digital input active	boolean	ro	0	Status diG	68
2014	n	Probe fault SBR	boolean	ro	0	Status SBR	9
2015	n	Alarm HB active (TA phase 1)	boolean	ro	0	Status HB1	76
2016	n	Alarm HB active (TA phase 2)	boolean	ro	0	Status HB2	77
2017	n	Alarm HB active (TA phase 3)	boolean	ro	0	Status HB3	78
2018	n	Status power alarm	boolean	ro	0	Status PW	80
2019	n	Reset alarms memory	boolean	rw	0	Reset AL	79
201A	n	Hold input active	boolean	rw	0	Hold	64
2080	n	Alarm 1 direct/inverse	boolean	rw	0	AL1 direct	46
2084	n	Alarm 1 absolute/relative	boolean	rw	0	AL1 absolute	47
2088	n	Alarm 1 normal/symmetrical	boolean	rw	0	AL1 normal	48
208C	n	Alarm 1 to disabled on power-up	boolean	rw	0	AL1 disable	49
2090	n	Alarm 1 with memory	boolean	rw	0	AL1 memory	50
2081	n	Alarm 2 direct/inverse	boolean	rw	0	AL2 direct	54
2085	n	Alarm 2 absolute/relative	boolean	rw	0	AL2 absolute	55
2089	n	Alarm 2 normal/symmetrical	boolean	rw	0	AL2 normal	56
208D	n	Alarm 2 to disabled on power-up	boolean	rw	0	AL2 disable	57
2091	n	Alarm 2 with memory	boolean	rw	0	AL2 memory	58
2082	n	Alarm 3 direct/inverse	boolean	rw	0	AL3 direct	36
2086	n	Alarm 3 absolute/relative	boolean	rw	0	AL3 absolute	37
208A	n	Alarm 3 normal/symmetrical	boolean	rw	0	AL3 normal	38
208E	n	Alarm 3 to disabled on power-up	boolean	rw	0	AL3 disable	39
2092	n	Alarm 3 with memory	boolean	rw	0	AL3 memory	40
2083	n	Alarm 4 direct/inverse	boolean	rw	0	AL4 direct	70
2087	n	Alarm 4 absolute/relative	boolean	rw	0	AL4 absolute	71
208B	n	Alarm 4 normal/symmetrical	boolean	rw	0	AL4 normal	72
208F	n	Alarm 4 to disabled on power-up	boolean	rw	0	AL4 disable	73
2093	n	Alarm 4 with memory	boolean	rw	0	AL4 memory	74
200F	n	Reset alarm LBA	boolean	rw	0	Reset LBA	81
2095	n	Alarm state OUT1	boolean	ro	0	Stato OUT1	82
2096	n	Alarm state OUT2	boolean	ro	0	Stato OUT2	83
2097	n	Alarm state OUT3	boolean	ro	0	Stato OUT3	84

DEVICE AND MANUFACTURER PROFILE CANopen			GFX4_C06.EDS			GFX4 MODBUS	
INDEX (hex)	SUB INDEX	DESCRIPTION	DATA	ACC.	DEFAULT (hex)	FUNCTION	ADD. (dec)
		bit control					
2098	n	Alarm state OUT4	boolean	ro	0	Stato OUT4	85
2099	n	Alarm state OUT5	boolean	ro	0	Stato OUT5	86
209A	n	Alarm state OUT6	boolean	ro	0	Stato OUT6	87
209B	n	Alarm state OUT7	boolean	ro	0	Stato OUT7	88
209C	n	Alarm state OUT8	boolean	ro	0	Stato OUT8	89
209D	n	Alarm state OUT9	boolean	ro	0	Stato OUT9	90
209E	n	Alarm state OUT10	boolean	ro	0	Stato OUT10	91
201B	n	Digital input 2 ON	boolean	ro	0	Stato diG2	92
2094	n	Reset diagnostics alarms	boolean	rw	0	Reset DIAG	105
		Operations commands to bit GFX4-IR					
20A0	n	Softstart of phase in course	boolean	ro	0	-	106
20A1	n	Softstart of phase finished	boolean	ro	0	-	107
20A2	n	Restart softstart of phase	boolean	rw	0	-	108
20A3	n	Calibration voltage feedback	boolean	rw	0	-	109
20A4	n	Calibration current feedback	boolean	rw	0	-	110
20A5	n	Calibration power feedback	boolean	rw	0	-	111
20A6	n	Calibration threshold alarmHB	boolean	rw	0	-	112
20A7	n	Calibration feedback selected in Hd.6	boolean	rw	0	-	113
20A8	1	Restart Softstart	boolean	rw	0	Restart	30
20F0	n	Alarm state SSR_SHORT phase 1	boolean	ro	0	SHORT1	96
20F1	n	Alarm state SSR_SHORT phase 2	boolean	ro	0	SHORT2	97
20F2	n	Alarm state SSR_SHORT phase 3	boolean	ro	0	SHORT3	98
20F3	n	Alarm state NO_VOLTAGE phase 1	boolean	ro	0	NO_VOLT1	99
20F4	n	Alarm state NO_VOLTAGE phase 2	boolean	ro	0	NO_VOLT2	100
20F5	n	Alarm state NO_VOLTAGE phase 3	boolean	ro	0	NO_VOLT3	101
20F6	n	Alarm state NO_CURRENT phase 1	boolean	ro	0	NO_CUR1	102
20F7	n	Alarm state NO_CURRENT phase 2	boolean	ro	0	NO_CUR2	103
20F8	n	Alarm state NO_CURRENT phase 3	boolean	ro	0	NO_CUR3	104
		Work registers					
7130	n	Process variable	integer16	ro	-	P.V.	0
2001	n	Process variable	integer16	ro	-	P.V.	0
7401	n	Setpoint active	integer16	ro	-	SPA	1
2002	n	Setpoint active	integer16	ro	-	SPA	1
2020	n	Local Setpoint (see note 1)	integer16	rw	0	_SP	138
7402	n	Setpoint 1 (see note 1)	integer16	rw	0064	SP.1	230
7403	n	Setpoint 2 (see note 1)	integer16	rw	00C8	SP.2	231
2226	n	Serial remote Setpoint	integer16	rw	-	SP.rS	250
2025	n	SPA-PV Deviation	integer16	ro	-	-	4
209F	n	Value of auxiliary analog input	integer 16	ro	-	In.2	602
7400	n	Current transformer value	integer16	ro	-	I.tA1on	468
2003	n	Auxiliary input value	integer16	ro	-	I.tA1	227
6410	n	Curent value of control output	integer16	ro	-	Ou.P	2
2004	n	Curent value of controloutput	integer16	ro	-	Ou.P	2
2030	n	Voltmeter input value phase 1	integer16	ro	-	I.tU1	232

DEVICE AND MANUFACTURER PROFILE CANopen			GFX4_C06.EDS			GFX4 MODBUS	
INDEX (hex)	SUB INDEX	DESCRIPTION	DATA	ACC.	DEFAULT (hex)	FUNCTION	ADD. (dec)
2031	n	Voltmeter input value phase 2	integer16	ro	-	I.tU2	492
2032	n	Voltmeter input value phase 3	integer16	ro	-	I.tU3	493
2033	n	Ammeter input value phase 1	integer16	ro	-	I.tA1on	468
2034	n	Ammeter input value phase 2	integer16	ro	-	I.tA2on	498
2035	n	Ammeter input value phase 3	integer16	ro	-	I.tA3on	499
2036	n	Ammeter input value instantaneous phase 1	integer16	ro	-	I.tA1	473
2037	n	Ammeter input value instantaneous phase 2	integer16	ro	-	I.tA2	490
Operating registers							
2038	n	Ammeter input value instantaneous phase 3	integer16	ro	-	I.tA3	491
2039	n	Voltmetric input value filtered phase1	integer16	ro	-	I.UF1	322
203A	n	Voltmetric input value filtered phase 2	integer16	ro	-	I.UF2	496
203B	n	Voltmetric input value filtered phase 3	integer16	ro	-	I.UF3	497
203C	n	Ammeter input value filtered phase 1	integer16	ro	-	I.AF1	756
203D	n	Ammeter input value filtered phase 2	integer16	ro	-	I.AF2	494
203E	n	Ammeter input value filtered phase 3	integer16	ro	-	I.AF3	495
750A	n	Alarm 1 setpoint	integer16	rw	01F4	AL.1	12
751A	n	Alarm 2 setpoint	integer16	rw	0064	AL.2	13
752A	n	Alarm 3 setpoint	integer16	rw	02BC	AL.3	14
753A	n	Alarm 4 setpoint	integer16	rw	0320	AL.4	58
2040	n	Alarm HB setpoint phase 1	integer16	rw	0064	A.Hb1	55
2041	n	Alarm HB setpoint phase 2	integer16	rw	0064	A.Hb2	502
2042	n	Alarm HB setpoint phase 3	integer16	rw	0064	A.Hb3	503
6412	n	Control output value in manual	integer16	rw	0000	Ou.P	252
201C	n	Process variable after Fld filter	integer16	ro	-	---	349
201D	n	Digital/relays outputs MASKOUT	unsigned16	ro	-	---	319
201E	n	Operating commands instrum. STATUS_W	unsigned16	rw	-	---	305
201F	n	Digital inputs value INPUT_DIG	unsigned16	ro	-	---	317
2056	n	Flag PID	unsigned16	ro	-	---	296
2029	n	Alarm state ALSTATE IRQ	unsigned16	ro	-	---	318
202A	n	Alarm state HB ALSTATE_HB	unsigned16	ro	-	---	504
202B	n	Alarm state ALSTATE	unsigned16	ro	-	---	512
GFX4-IR Operating registers							
20B0	n	Voltage status	unsigned16	ro	-	---	702
20B1	n	Frequency	unsigned16	ro	-	FrEq	315
20B2	n	Current of peak in softstart of phase	unsigned16	ro	-	I.tAP	709
20B3	n	Concatenate voltage V21	unsigned16	ro	-	I.V21	710
20B4	n	Concatenate voltage V32	unsigned16	ro	-	I.V32	711
20B5	n	Concatenate voltage V13	unsigned16	ro	-	I.V13	712
20B6	n	Power factor	unsigned16	ro	-	CoS.F	716
20B7	n	Loaded power monophase	unsigned16	ro	-	Ld.P	719
20B8	n	Loaded power threephase	unsigned16	ro	-	Ld.P.t	720
20B9	n	Loaded impedance monophase	unsigned16	ro	-	Ld.I	74

DEVICE AND MANUFACTURER PROFILE CANopen			GFX4_C06.EDS			GFX4 MODBUS	
INDEX (hex)	SUB INDEX	DESCRIPTION	DATA	ACC.	DEFAULT (hex)	FUNCTION	ADD. (dec)
GFX4-IR Operating registers							
20BA	n	Loaded impedance threephase	unsigned16	ro	-	Ld.I.t	750
20BB	n	Loaded voltage monophase	unsigned16	ro	-	Ld.V	751
20BC	n	Loaded voltage threephase	unsigned16	ro	-	Ld.V.t	752
20BD	n	Loaded current monophase	unsigned16	ro	-	Ld.A	753
20BE	n	Loaded current threephase	unsigned16	ro	-	Ld.A.t	754
20BF	n	Threshold dynamic alarm HB	unsigned16	ro	-	Hb.tr	744
20CF	n	Feedback reference	unsigned16	ro	-	AriF	757

DEVICE AND MANUFACTURER PROFILE CANopen			GFX4_C06.EDS			GFX4 MODBUS	
INDEX (hex)	SUB INDEX	DESCRIPTION	DATA	ACC.	DEFAULT (hex)	FUNCTION	ADD. (dec)
		Information registers (InFo)					
2227	n	Builder GEFRAN code	unsigned16	ro	5000	-	120
2221	n	Device ID	unsigned16	ro	-	d.Id	121
2222	n	Software version	unsigned16	ro	-	UPd	122
2223	n	Voltage on load	unsigned16	ro	-	FUSE	509
2224	n	Main input self-diagnostics error code	unsigned16	ro	-	Err	85
2225	n	Auxiliary input self-diagnostics error code	unsigned 16	ro	-	Er.2	606
2170	n	Hardware configuration	unsigned16	ro	-	C.Hd	190
2171	n	Expanded HW configuration	unsigned16	ro	-	C.Hd1	508
2175	n	Jumper state	unsigned 16	ro	-	-	346
2176	n	Software Fieldbus version	unsigned 16	ro	-	Upd.F	693
2177	n	Fieldbus Address node	unsigned 16	ro	-	Cod.F	695
2178	n	Baudrate Fieldbus	unsigned 16	ro	-	bAU.F	696
		Controller configuration registers (CFG)					
2050	n	Enable selftuning,autotuning	unsigned16	rw	0000	S.tu	31
7450	n	Proportional heating band	integer16	rw	000A	h.Pb	5
7452	n	Integral heating time	integer16	rw	0190	h.It	7
7454	n	Derivative heating time	integer16	rw	0064	h.dt	8
6414	n	Max. limit heating power	integer16	rw	03E8	h.P.H	42
6413	n	Min. limit heating power	integer16	rw	0000	h.P.L.	254
2220	n	Cooling fluid	integer16	rw	0000	C.ME	513
2234	n	Cooling setpoint relative to heating	integer16	rw	0000	c.SP	39
7451	n	Proportional cooling band	integer16	rw	000A	c.Pb	6
7453	n	Integral cooling time	integer16	rw	0190	c.It	76
7455	n	Derivative cooling time	integer16	rw	0064	c.dt	77
2052	n	Reference voltage for manual power correction	integer16	rw	0000	riF	505
2054	n	Manual power correction	integer16	rw	0000	Cor	506
2060	n	Max. limit cooling power	integer16	rw	03E8	c.P.H	43
2062	n	Min. limit cooling power	integer16	rw	0000	c.P.L.	255
2064	n	Manual reset	integer16	rw	0000	rSt	78
2066	n	Reset power	integer16	rw	0000	P.rS	516
2068	n	Antireset	integer16	rw	0000	A.rS	79
206A	n	Feedforward	integer16	rw	0000	FFd	80
206C	n	Softstart time	integer16	rw	0000	Sof	147
206E	n	Hysteresis for alarm 1	integer16	rw	FFFF	Hy.1	27
2070	n	Hysteresis for alarm 2	integer16	rw	FFFF	Hy.2	30

DEVICE AND MANUFACTURER PROFILE CANopen		GFX4_C06.EDS				GFX4 MODBUS	
INDEX (hex)	SUB INDEX	DESCRIPTION	DATA	ACC.	DEFAULT (hex)	FUNCTION	ADD. (dec)
Controller configuration registers (CFG)							
2072	n	Hysteresis for alarm 3	integer16	rw	FFFF	Hy.3	53
2074	n	Hysteresis for alarm 4	integer16	rw	FFFF	Hy.4	59
2076	n	Delay time HB alarm trip	integer16	rw	001E	Hb.t	56
2078	n	Delay time LBA alarm trip	integer16	rw	012C	Lb.t	44
207A	n	Limit for power supplied with LBA alarm	integer16	rw	00FA	Lb.P	119
207C	n	Fault Action power	integer16	rw	0000	FA.P	228
207E	n	Set gradient	integer16	rw	0000	G.SP	234
207F	n	Set gradient for SP2	integer16	rw	0000	G.S2	259
206D	n	Phase softstart time	integer16	rw	0000	PS.of	629
206B	n	Maximum phase softstart	integer16	rw	0000	PS.Hi	630
Hot Runners controller configuration registers (CFG)							
2100	n	Power alarm intervention delay	integer16	rw	0000	P.Ft	260
2102	n	Hot Runners stability band	integer16	rw	0000	b.St	261
2104	n	Hot Runners power alarm band	integer16	rw	0000	b.PF	262
2106	n	Hot Runners Set point soft start	integer16	rw	0000	SP.S	263
2108	n	Hot Runners soft start power	integer16	rw	0000	So.P	264
GFX4-IR (CFG) Configuration registers							
20C0	n	Abilitazione modalità di innesco	unsigned16	rw	0000	Hd.5	703
20C1	n	Ramp duration of phase softstart	unsigned16	rw	00C8	PS.tm	705
20C2	n	Limit maximum current in ramp softstart phase	unsigned16	rw	-	PS.tA	706
20C3	n	Limit maximum current rating	unsigned16	rw	-	Fu.tA	707
20C4	n	Minimal number cycles BF	unsigned16	rw	0001	bF.Cy	704
20C5	n	First delay trigger innesco	unsigned16	rw	0000	dL.t	708
20C6	n	Time of OFF before the delay trigger first in.	unsigned16	rw	00C8	dL.oF	738
20C7	n	Percentage threshold alarm in calibration HB	unsigned16	rw	01F4	Hb.P	737
20C8	n	Proporzional band for feedback	unsigned16	rw	03E8	Fb.Pb	740
20C9	n	Integral time for feedback	unsigned16	rw	0000	Fb.It	741
20CA	n	Current found in calibration HB	unsigned16	rw	0000	Hb.tA	742
20CB	n	Power found in calibration HB	unsigned16	rw	0000	Hb.Pw	743
20CC	n	Min input range CT1	unsigned16	rw	-	L.tA1	746
20CD	n	Min input range CT2	unsigned16	rw	-	L.tA2	747
20CE	n	Min input range CT3	unsigned16	rw	-	L.tA3	748

DEVICE AND MANUFACTURER PROFILE CANopen			GFX4_C06.EDS			GFX4 MODBUS	
INDEX (hex)	SUB INDEX	DESCRIPTION	DATA	ACC.	DEFAULT (hex)	FUNCTION	ADD. (dec)
GFX4-IR (CFG) Configuration registers							
20E0	n	Point 0 input CT from calibration HB	unsigned16	rw	-	Ir.00	758
20E1	n	Point 1 input CT from calibration HB	unsigned16	rw	-	Ir.01	759
20E2	n	Point 2 input CT from calibration HB	unsigned16	rw	-	Ir.02	760
20E3	n	Point 3 input CT from calibration HB	unsigned16	rw	-	Ir.03	761
20E4	n	Point 4 input CT from calibration HB	unsigned16	rw	-	Ir.04	767
20E5	n	Point 5 input CT from calibration HB	unsigned16	rw	-	Ir.05	768
20E6	n	Point 6 input CT from calibration HB	unsigned16	rw	-	Ir.06	769
20E8	n	Gradient of control output	unsigned16	rw	-	G.Out	763
20E9	n	Uscita minima di innesco	unsigned16	rw	-	Lo.P	764
20EA	n	Percentage of power output	unsigned16	rw	-	P.PEr	765
20EB	n	Offset of power output	unsigned16	rw	-	P.oFS	766
Serial interface configuration parameters (Ser)							
2342	n	Instrument ID code	unsigned16	ro	-	Cod	46
2344	n	Select Modbus baud rate serial 1	unsigned16	ro	-	bAu	45
2345	n	Select Modbus baud rate serial 2	unsigned16	ro	-	bAu.2	626
2172	n	Select Modbus parity serial 1	unsigned16	ro	-	PAr	47
2173	n	Select parity Modbus serial 2	unsigned16	ro	-	PAr.2	627
2174	n	Input management from serial	unsigned16	rw	0000	S.In	224
2217	n	State of digital outputs	unsigned16	ro	-	-	664
2218	n	Output management from serial	unsigned16	rw	0000	S.Ou	225
2219	n	Control LEDs and inputs from serial	unsigned16	rw	0000	S.LI	628
2228	n	Input/output value from serial in RAM	unsigned16	rw	-	V_IN_OUT	344
2230	n	LED value from serial in RAM	unsigned16	rw	-	V_X_LEDS	351
2236	n	Value Input In.1 from serial in RAM	unsigned16	rw	-	VALUE_F	347
2237	n	Value Input In.2 from serial in RAM	unsigned16	rw	-	VALAUX_F	348
2238	n	Value Input In.CT from serial in RAM	unsigned16	rw	-	VALTA_F	685
Input configuration parameters (InP)							
2200	n	Define remote Setpoint	unsigned16	rw	0000	SP.r	18
6110	n	Input probe type (note 2)	integer16	rw	2710	Typ	400
221a	n	Auxiliary input probe type	integer16	rw	0000	tP.2	181
2202	n	Digital input filter in seconds	integer16	rw	0001	Flt	24
2204	n	Digital input filter in input scale points	integer16	rw	0005	Fld	179
6132	n	Decimal point position for input scale	integer8	ro	0000	dP.S	403

DEVICE AND MANUFACTURER PROFILE CANopen			GFX4_C06.EDS			GFX4 MODBUS	
INDEX (hex)	SUB INDEX	DESCRIPTION	DATA	ACC.	DEFAULT (hex)	FUNCTION	ADD. (dec)
Input configuration parameters (InP)							
6407	n	Decimal point position for amper. input	unsigned8	rw	00	dP.S	403
7148	n	Min limit input scale	integer16	rw	0000	Lo.S	401
7149	n	Max limit input scale	integer16	rw	03E8	Hi.S	402
7124	n	Input Offset correction	integer16	rw	0000	oFS	519
2206	n	Digital input filter CT in seconds	integer16	rw	0000	Ft.tA	219
2208	n	Digital input filter VT in seconds	integer16	rw	0000	Ft.tU	412
2210	n	Max limit input CT scalephase 1	integer16	rw	-	H.tA1	405
2212	n	Input Offset correction CT phase 1	integer16	rw	0000	o.tA1	220
2240	n	Max limit input CT scale phase 2	integer16	rw	-	H.tA2	413
2242	n	Input Offset correction CT phase 2	integer16	rw	0000	o.tA2	415
2244	n	Max limit input CT scale phase 3	integer16	rw	-	H.tA3	414
2246	n	Input Offset correction CT phase 3	integer16	rw	0000	o.tA3	416
2214	n	Max limit input VT scale phase 1	integer16	rw	14B4	H.tU1	410
2216	n	Input Offset correction VT phase 1	integer16	rw	0000	o.tU1	411
2248	n	Max limit input VT scale phase 2	integer16	rw	14B4	H.tU2	417
224A	n	Input Offset correction VT phase 2	integer16	rw	0000	o.tU2	419
224C	n	Max limit input VT scale phase 3	integer16	rw	14B4	H.tU3	418
224E	n	Input Offset correction VT phase 3	integer16	rw	0000	o.tU3	420
2241	n	Gain input CT phase 2	integer16	rw	-	G.tA2	529
2245	n	Gain input CT phase 3	integer61	rw	-	G.tA3	530
7404	n	Min settable limit SP and alarms	integer16	rw	0000	Lo.L	25
7405	n	Max settable limit SP and alarms	integer16	rw	03E8	Hi.L	26
221C	n	Min limit auxiliary input scale	integer16	rw	0000	LS.2	404
222A	n	Maximum limit auxiliary input scale	integer16	rw	1000	HS.2	603
222B	n	Digital filter auxiliary input	integer16	rw	0001	FLt.2	604
222C	n	decimal point positionauxiliary input	integer16	rw	0000	dP.2	677
222D	n	Correction offset auxiliary input	integer16	rw	0000	oFS.2	605

DEVICE AND MANUFACTURER PROFILE CANopen			GFX4_C06.EDS			GFX4 MODBUS	
INDEX (hex)	SUB INDEX	DESCRIPTION	DATA	ACC.	DEFAULT (hex)	FUNCTION	ADD. (dec)
		Output configuration parameters (Out)					
2300	n	Select magnitude ref. alarm 1	unsigned16	rw	0000	A1.r	215
2302	n	Select magnitude ref. alarm 2	unsigned16	rw	0000	A2.r	216
2304	n	Select magnitude ref. alarm 3	unsigned16	rw	0000	A3.r	217
2306	n	Select magnitude ref. alarm 4	unsigned16	rw	0000	A4.r	218
2308	n	Alarm type 1	unsigned16	rw	0000	A1.t	406
2310	n	Alarm type 2	unsigned16	rw	0000	A2.t	407
2312	n	Alarm type 3	unsigned16	rw	0000	A3.t	408
2314	n	Alarm type 4	unsigned16	rw	0000	A4.t	409
2316	n	HB alarm function	unsigned16	rw	0000	Hb.F	57
2318	n	Assign function OUT 1	unsigned16	rw	0000	rL.1	160
2320	n	Assign function OUT 2	unsigned16	rw	0001	rL.2	163
2322	n	Assign function OUT 3	unsigned16	rw	0002	rL.3	166
2324	n	Assign function OUT 4	unsigned16	rw	0023	rL.4	170
2326	n	Assign function OUT 5	unsigned16	rw	0004	rL.5	171
2328	n	Assign function OUT 6	unsigned16	rw	00A0	rL.6	172
7456	n	Cycle time OUT 1	integer16	rw	0014	Ct.1	152
7457	n	Cycle time OUT 2	integer16	rw	0014	Ct.2	159
2330	n	Define status of action Fault outputs	unsigned16	rw	0000	rEL	229
232E	n	Percentage of Heat or Cool on Out7	unsigned16	rw	-	RAP	421

DEVICE AND MANUFACTURER PROFILE CANopen		GFX4_C06.EDS				GFX4 MODBUS	
INDEX (hex)	SUB INDEX	DESCRIPTION	DATA	ACC.	DEFAULT (hex)	FUNCTION	ADD. (dec)
Hardware configuration parameter (Hrd)							
2332	n	Enable Multiset via serial	unsigned16	rw	0000	hd.1	191
2334	n	Control type	unsigned16	rw	0006	Ctr	180
2336	n	Enable alarms	unsigned16	rw	0013	AI.n	195
2338	n	Digital input function	unsigned16	rw	0000	diG	140
2339	n	Digital input 2 function	unsigned16	rw	0000	diG.2	618
2340	n	Status RN led function	unsigned16	rw	0010	Ld.St	197
2341	n	ER LED function	unsigned16	rw	000C	Ld.2	619
234A	n	DI1 LED function	unsigned16	rw	0006	Ld.3	620
234B	n	DI2 LED function	unsigned16	rw	000B	Ld.4	621
234C	n	O1 LED function	unsigned16	rw	0001	Ld.5	622
234D	n	O2 LED function	unsigned16	rw	0002	Ld.6	623
234E	n	O3 LED function	unsigned16	rw	0003	Ld.7	624
234F	n	O4 LED function	unsigned16	rw	0004	Ld.8	625
2346	n	Auxiliary input selection	unsigned16	rw	0000	AI.2	194
2348	n	Hot Runners functions selection	unsigned16	rw	0000	Hot	265
2350	n	Attribute OUT1 physical output	unsigned16	rw	0001	out.1	607
2351	n	Attribute OUT2 physical output	unsigned16	rw	0002	out.2	608
2352	n	Attribute OUT3 physical output	unsigned16	rw	0003	out.3	609
2353	n	Attribute OUT4 physical output	unsigned16	rw	0004	out.4	610
2354	n	Attribute OUT5 physical output	unsigned16	rw	0005	out.5	611
2355	n	Attribute OUT6 physical output	unsigned16	rw	0006	out.6	612
2356	n	Attribute OUT7 physical output	unsigned16	rw	0007	out.7	613
2357	n	Attribute OUT8 physical output	unsigned16	rw	0008	out.8	614
2358	n	Attribute OUT9 physical output	unsigned16	rw	0011	out.9	615
2359	n	Attribute OUT10 physical output	unsigned16	rw	0012	out.10	616
2360	n	Attribute zone process variable	unsigned16	rw	0004	SPU	617
2361	n	Enable POWER_FAULT alarms	unsigned16	rw	0000	hd.2	660
2362	n	Refresh rate InTA (GFX4)	unsigned16	rw	000A	dG.t	661
2363	n	NO_VOLTAGE alarms time filter	unsigned16	rw	000A	dG.F	662
2364	n	Minimum power to acquire In.TA (GFX4)	unsigned16	rw	0064	dG.P	663
2365	n	Enable heuristic power control	unsigned16	rw	0000	hd.3	680
2366	n	Max. current for heuristic power control	unsigned16	rw	0000	I.HEU	681
2367	n	Enable heterogeneous power control	unsigned16	rw	0000	hd.4	682
2368	n	Max. current for heterogeneous power control	unsigned	rw	0000	I.Het	683
2369	n	Modality ON	unsigned16	rw	0000	P.On.t	699
2370	n	Modality OFF SW	unsigned16	rw	0000	OFF.t	700

DEVICE AND MANUFACTURER PROFILE CANopen			GFX4_C06.EDS			GFX4 MODBUS	
INDEX (hex)	SUB INDEX	DESCRIPTION	DATA	ACC.	DEFAULT (hex)	FUNCTION	ADD. (dec)
GFX4-IR (Hrd) Hardware configuration parameter							
20D0	n	Feedback modality ON	integer16	rw	0000	Hd.6	730
20D1	n	Correction maximum feedback of voltage	integer16	rw	0000	Cor.V	731
20D2	n	Correction maximum feedback of current	integer16	rw	0000	Cor.I	732
20D3	n	Correction maximum feedback of power	integer16	rw	0000	Cor.P	733
20D4	n	Reference voltage feedback	integer16	rw	0000	rif.V	734
20D5	n	Reference current feedback	integer16	rw	0000	rif.I	735
20D6	n	Reference power feedback	integer16	rw	0000	rif.P	736
Custom linearization for main input (Lin)							
5000	n	Step 0 start scale value	integer16	rw	0000	S.00	86
5001	n	Step 1 scale	integer16	rw	001F	S.01	87
“	“	“	“	“		“	“
501F	n	Step 31 scale	integer16	rw	02B8	S.31	117
5020	n	Step 32 full scale value	integer16	rw	03E8	S.32	118
5021	n	Step 33 mV start scale for CT probe	integer16	rw	0000	S.33	293
5022	n	Step 34 mV full scale for CT probe	integer16	rw	0001	S.34	294
5023	n	Step 35 mV at TAMB 50°C for CT probe	integer16	rw	0000	S.35	295
Commonly used parameters not described in GFX4 manual							
2000	n	Instrument work status (note 3)	unsigned16	ro	-	---	467
2021	n	Instrument work state 1 (note 17)	unsigned16	ro	-	-	469
2022	n	Instrument work state 2 (note 9)	unsigned16	ro	-	-	632
2023	n	Instrument work state 3 (note 10)	unsigned16	ro	-	-	633
2024	n	Instrument work state 4 (note 11)	unsigned16	ro	-	-	634
2026	n	Temperature inside instrument	unsigned16	ro	-	-	635
2027	n	Derive temperature inside heatsink	unsigned16	ro	-	DERIV_SSR	675
2028	n	Temperature inside heatsink	unsigned16	ro	-	-	655
2371	n	Configuration User 1	unsigned16	rw	-	---	458
2372	n	Configuration User 2	unsigned16	rw	-	---	459
2373	n	Configuration User 3	unsigned16	rw	-	---	460
2374	n	Configuration User 4	unsigned16	rw	-	---	461
2375	n	Configuration User 5	unsigned16	rw	-	---	462
5025	n	Commandsof operative controller	unsigned16	rw	-	---	-
5A5A	0	Select CANopen baud rate (see note 4)	unsigned8	rw	2		
5A5B	0	Select ID NODE (note 5)	unsigned 32	rw	-		

DEVICE AND MANUFACTURER PROFILE CANopen			GFX4_C06.EDS			GFX4 MODBUS	
INDEX (hex)	SUB INDEX	DESCRIPTION	DATA	ACC.	DEFAULT (hex)	FUNCTION	ADD. (dec)
Commonly used parameters not described in GFX4 manual							
5A5C	0	Mappable objects in 2nd TXPDO	unsigned8	ro	3		
	1	Index object 1 in 2nd TPDO	unsigned16	rw	6410		
	2	Index object 2 inl 2nd TPDO	unsigned16	rw	7400		
	3	Index object 3 in 2nd TPDO	unsigned16	rw	6600		
5A5D	0	Watch dog rete CANBUS (note 6)	unsigned16	rw	0000		
5A5E	0	Mappable objects in 1st RXPDO	unsigned8	ro	2		
	1	Index object 1 in 1st RPDO	unsigned16	rw	750A		
	2	Index object 2 in 1st RPDO	unsigned16	rw	751A		
5A5F	n	Operative pushbutton GFX-OP (note13)	unsigned16	ro	-	---	685
1029	0	Nr. of Error behaviour objects	unsigned8	ro	7	see CiA DS404	
	1	Communication Error	unsigned16	rw	-		
	2	Digital Input Error	unsigned16	rw	0000		
	3	Analog Input Error	unsigned16	rw	-		
	4	Digital Output Error	unsigned16	rw	0000		
	5	Analog Output Error	unsigned16	rw	0000		
	6	Controller Error	unsigned16	rw	0000		
	7	Alarm Error	unsigned16	rw	0000		
7133	n	Max variation PV for PDO “Event”	integer16	rw	0000	see CiA DS404	
6406	n	Physical unit ammeter input value	unsigned32	ro	002D0000	see CiA DS404	
6415	n	Physical unit power output value	unsigned32	ro	00000000	see CiA DS404	
6422	n	Controller ON/OFF	boolean	rw	1	see CiADS404	
6425	n	Operating commands enable byte (note 7)	unsigned8	rw	-	see CiA DS404	
6509	n	Action performed with alarm AL1 active	unsigned8	ro	02	see CiA DS404	
6519	n	Action performed with alarm AL2 active	unsigned8	ro	02	see CiA DS404	
6529	n	Action performed with alarm AL3 active	unsigned8	ro	02	see CiA DS404	
6539	n	Action performed with alarm AL4 active	unsigned8	ro	02	see CiA DS404	
6600	n	Status of alarms AL1 - AL4	unsigned8	ro	-	see CiA DS404	
6427	n	Controller status (note 8)	unsigned16	ro	-	see CiA DS404	

note 1: If the Enable multiset “hd.1” (index 2332) parameter equals 0 (default), the active Setpoint “SPA” (index 2002) corresponds to the local Setpoint “_SP” (index 2020).
If the Enable multiset “hd.1” (index 2332) parameter equals 1 or 3, the active Setpoint “SPA” (index 2002) corresponds to Setpoint 1 (index 7404) or Setpoint 2 (index 7403).

note 2: The input probe type “TyP” is made Gefran-specific by adding 10,000 to the values described in the GEFLEX Modbus manual (ex. CT J °C = 2710hex, CT J °F = 2711hex, PT100 °C = 272Ehex).

note 3: The 2000 index defines instrument work status by means of the following bits:

0 Alarm AL1 or AL2 or AL3 or AL4 or ALHB active
1 Alarm Lo active (process variable value < min. limit “Lo.S”)
2 Alarm Hi active (process variable value > max. limit “Hi.S”)
3 Alarm ERR active (third wire interrupted due to PT100 or incorrect CT connection)
4 Alarm SBR active (probe interrupted)
5 Controller heating (HEAT)
6 Controller cooling (COOL)
7 Alarm LBA active (control loop error)
8 Alarm AL1 active
9 Alarm AL2 active
10 Alarm AL3 active
11 Alarm AL4 active
12 Alarm ALHB active
13 Controller in software shutdown (OFF)
14 Controller in manual (MAN)
15 Controller in remote Setpoint (REM)

note 4: The change in the value of index 5A5A is acquired at the next power-up.
Table of CANopen baud rate values:

0 1000 kbit/s
1 800 kbit/s
2 500 kbit/s (default)
3 250 kbit/s
4 125 kbit/s
5 100 kbit/s
6 50 kbit/s
7 20 kbit/s
8 10 kbit/s

note 5: **SW NODE-ID CONFIGURATION PROCEDURE FOR GFX4CAN**

1	Connect a CANopen Master terminal enabled to generate SDO messages (SW PLC Configurator, Supervision Terminal, CAN Analyzer, etc..) to the CAN-BUS port of the GFX4 instrument to be configured

↓

2	Turn on the instrument and wait a few seconds for the GFX4-CAN to send a BOOT-UP message to the network indicating the close of internal initialisation procedures and “PRE-OPERATIONAL” preparation for operational status.

↓

3	The COB-ID of this message is: 1729 + NODE-ID (decimal format) 700 + NODE-ID (hexadecimal format) This allows us to determine whether the NODE-ID of our GFX4 corresponds to the Rotary Switch, or has been previously SW configured.

↓

4	Send the GFX4 an SDO reading message with the NODE-ID previously verified at INDEX 5A5B SUB 0. The data received at 4 bytes has the following format:

LSB	**D0**	**D1**	**D2**	**D3**	**D4**	**D5**	**D6**	**D7**	MSB
	NODE	0	0	0	0	0	0	TYPE	

Where “NODE” is the current node address and “TYPE” is the configuration:

TYPE = 255 > HW configuration from Rotary Switch

TYPE = 0 > SW configuration from SDO

↓

5	To configure a new NODE-ID SW, send the GFX4 a write message at INDEX 5A5B SUB 0, in the format described at point 4, with TYPE = 0 and NODE = new NODE_ID.

↓

6	To reset the HW configuration using the Rotary Switch, send the GFX4 a write at INDEX 5A5B SUB 0, in the format described in point 4, with TYPE = 256 and NODE = 1.

↓

7	Turn off the instrument, then turn it on again so that it will acquire the new NODE-ID.

SELECTION NODE-ID HW CANopen “BRIDGE”

CANopen MODULES	NODE -ID HW	GFX4_1 (CAN)			GFX4_2 (MODBUS)			GFX4_3 (MODBUS)			GFX4_4 (MODBUS)		
		ROTARY SWITCH	NODE-ID zone 1	NODE-ID zone 4	ROTARY SWITCH	NODE-ID zone 5	NODE-ID zone 8	ROTARY SWITCH	NODE-ID zone 9	NODE-ID zone 12	ROTARY SWITCH	NODE-ID zone 13	NODE-ID zone 16
1	3	3	3	6	7	7	10	11	11	14	15	15	18
2	19	19	19	22	23	23	26	27	27	30	31	31	34
3	35	35	35	38	39	39	42	43	43	46	47	47	50
4	51	51	51	54	55	55	58	59	59	62	63	63	66
5	67	67	67	70	71	71	74	75	75	78	79	79	82
6	83	83	83	86	87	87	90	91	91	94	95	95	98
7	99	99	99	102	-	-	-	-	-	-	-	-	-

Note: Tha “NODE-ID HW” corresponds to the selection of the Rotary Switch of the GFX4-CAN module

Max modules GFX4-CAN: 7
Max modulesGFX4-MODBUS: 18
Max control zones: 100
Free CAN nodes: 1, 2, 103..127

SELECTION NODE-ID SW CANopen “BRIDGE”													
CANopen MODULES	NODE -ID SW	GFX4_1 (CAN)			GFX4_2 (MODBUS)			GFX4_3 (MODBUS)			GFX4_4 (MODBUS)		
		ROTARY SWITCH	NODE-ID zone 1	NODE-ID zone 4	ROTARY SWITCH	NODE-ID zone 5	NODE-ID zone 8	ROTARY SWITCH	NODE-ID zone 9	NODE-ID zone 12	ROTARY SWITCH	NODE-ID zone 13	NODE-ID zone 16
1	3	1	3	6	5	7	10	9	11	14	13	15	18
2	19	1	19	22	5	23	26	9	27	30	13	31	34
3	35	1	35	38	5	39	42	9	43	46	13	47	50
4	51	1	51	54	5	55	58	9	59	62	13	63	66
5	67	1	67	70	5	71	74	9	75	78	13	79	82
6	83	1	83	86	5	87	90	9	91	94	13	95	98
7	99	1	99	102	5	103	106	9	107	110	13	111	114
8	115	1	115	118	5	119	122	9	123	126	-	-	-

Note: The “NODE-ID SW” is configured via SDO INDEX 5A5B SUB 0

Max modules GFX4-CAN: 8
Max moduli GFX4-MODBUS: 23
Max modulesGFX4-MODBUS: 124
Free CAN nodes: 1, 2, 127

SELECTION NODE-ID HW CANopen “HIGH P”				
CANopen MODULES	NODE-ID HW	GFX4_1 (CAN)		
		ROTARY SWITCH	NODE-ID zone 1	NODE-ID zone 4
1	3	3	3	3
2	4	4	4	4
3	5	5	5	5
4	6	6	6	6
5	7	7	7	7
6	8	8	8	8
7	9	9	9	9
8	10	10	10	10
9	11	11	11	11
10	12	12	12	12
11	13	13	13	13
12	14	14	14	14
13	15	15	15	15
14	16	16	16	16
15	17	17	17	17
16	18	18	18	18
17	19	19	19	19
18	20	20	20	20
19	21	21	21	21
20	22	22	22	22
21	23	23	23	23
22	24	24	24	24
23	25	25	25	25
24	26	26	26	26
25	27	27	27	27
26	28	28	28	28
27	29	29	29	29
28	30	30	30	30
29	31	31	31	31
30	32	32	32	32
31	33	33	33	33
32	34	34	34	34
33	35	35	35	35

34	36	36	36	36
35	37	37	37	37
36	38	38	38	38
37	39	39	39	39
38	40	40	40	40
39	41	41	41	41
40	42	42	42	42
41	43	43	43	43
42	44	44	44	44
43	45	45	45	45
44	46	46	46	46
45	47	47	47	47
46	48	48	48	48
47	49	49	49	49
48	50	50	50	50
49	51	51	51	51
50	52	52	52	52
51	53	53	53	53
52	54	54	54	54
53	55	55	55	55
54	56	56	56	56
55	57	57	57	57
56	58	58	58	58
57	59	59	59	59
58	60	60	60	60
59	61	61	61	61
60	62	62	62	62
61	63	63	63	63
62	64	64	64	64
63	65	65	65	65
64	66	66	66	66
65	67	67	67	67
66	68	68	68	68
67	69	69	69	69
68	70	70	70	70
69	71	71	71	71
70	72	72	72	72
71	73	73	73	73
72	74	74	74	74
73	75	75	75	75
74	76	76	76	76
75	77	77	77	77
76	78	78	78	78
77	79	79	79	79
78	80	80	80	80
79	81	81	81	81
80	82	82	82	82

81	83	83	83	83
82	84	84	84	84
83	85	85	85	85
84	86	86	86	86
85	87	87	87	87
86	88	88	88	88
87	89	89	89	89
88	90	90	90	90
89	91	91	91	91
90	92	92	92	92
91	93	93	93	93
92	94	94	94	94
93	95	95	95	95
94	96	96	96	96
95	97	97	97	97
96	98	98	98	98
97	99	99	99	99

Note: The “NODE-ID HW” corresponds to the selection of the Rotary Switch of the GFX4-CAN module

Max modules GFX4-CAN: **97**
Max modules GFX4-MODBUS: **0**
Max control zones: **388**
Free CAN nodes: **1, 2, 100..127**

SELECTION NODE-ID SW CANopen “HIGH P”				
MODULI CANopen	NODE-ID HW	GFX4_1 (CAN)		
		ROTARY SWITCH	NODE-ID zone 1	NODE-ID zone 4
1	3	1	3	3
2	4	1	4	4
3	5	1	5	5
4	6	1	6	6
5	7	1	7	7
6	8	1	8	8
7	9	1	9	9
8	10	1	10	10
9	11	1	11	11
10	12	1	12	12
11	13	1	13	13
12	14	1	14	14
13	15	1	15	15
14	16	1	16	16
15	17	1	17	17
16	18	1	18	18
17	19	1	19	19
18	20	1	20	20
19	21	1	21	21
20	22	1	22	22
21	23	1	23	23
22	24	1	24	24
23	25	1	25	25
24	26	1	26	26
25	27	1	27	27
26	28	1	28	28
27	29	1	29	29
28	30	1	30	30
29	31	1	31	31
30	32	1	32	32
31	33	1	33	33
32	34	1	34	34
33	35	1	35	35
34	36	1	36	36
35	37	1	37	37
36	38	1	38	38
37	39	1	39	39
38	40	1	40	40
39	41	1	41	41
40	42	1	42	42
41	43	1	43	43
42	44	1	44	44
43	45	1	45	45
44	46	1	46	46
45	47	1	47	47
46	48	1	48	48
47	49	1	49	49
48	50	1	50	50

49	51	1	51	51
50	52	1	52	52
51	53	1	53	53
52	54	1	54	54
53	55	1	55	55
54	56	1	56	56
55	57	1	57	57
56	58	1	58	58
57	59	1	59	59
58	60	1	60	60
59	61	1	61	61
60	62	1	62	62
61	63	1	63	63
62	64	1	64	64
63	65	1	65	65
64	66	1	66	66
65	67	1	67	67
66	68	1	68	68
67	69	1	69	69
68	70	1	70	70
69	71	1	71	71
70	72	1	72	72
71	73	1	73	73
72	74	1	74	74
73	75	1	75	75
74	76	1	76	76
75	77	1	77	77
76	78	1	78	78
77	79	1	79	79
78	80	1	80	80
79	81	1	81	81
80	82	1	82	82
81	83	1	83	83
82	84	1	84	84
83	85	1	85	85
84	86	1	86	86
85	87	1	87	87
86	88	1	88	88
87	89	1	89	89
88	90	1	90	90
89	91	1	91	91
90	92	1	92	92
91	93	1	93	93
92	94	1	94	94
93	95	1	95	95
94	96	1	96	96
95	97	1	97	97
96	98	1	98	98
97	99	1	99	99
98	100	1	100	100
99	101	1	101	101
100	102	1	102	102

101	103	1	103	103
102	104	1	104	104
103	105	1	105	105
104	106	1	106	106
105	107	1	107	107
106	108	1	108	108
107	109	1	109	109
108	110	1	110	110
109	111	1	111	111
110	112	1	112	112
111	113	1	113	113
112	114	1	114	114
113	115	1	115	115
114	116	1	116	116
115	117	1	117	117
116	118	1	118	118
117	119	1	119	119
118	120	1	120	120
119	121	1	121	121
120	122	1	122	122
121	123	1	123	123
122	124	1	124	124
123	125	1	125	125
124	126	1	126	126
125	127	1	127	127

N.B.: The “NODE-ID SW” is configured via SDO INDEX 5A5B SUB 0

Max modules GFX4-CAN: **125**
Max modules GFX4-MODBUS: **0**
Max control zones: **500**
Free CAN zones: **1, 2**

note 6: Value expressed in msec.

If there are no messages in the CANBUS network for this time, the GEFLEX allows connection of the GFX OP terminal to the internal bus.

note 7: According to CiA DS404 valid bits are:

0	Controller ON/OFF	(1 = ON)
1	Start Selftuning	(1 = Start Selftuning)
2	Manual controller	(1 = Manual)
3	SP1/SP2 selection	(1 = SP2)

nota 8: According to CiA DS404 valid bits are:

bit:	0	Controller ON/OFF	(1= ON)
	1	Start Selftuning	(1= Start Selftuning)
	2	Manual controller	(1= Manuale)
	3	SP1/SP2 selection	(1= SP2)

note 9: Index 2022 defines instrument work state by means of the following bits:

0	Alarm AL1 on
1	Alarm AL2 on
2	Alarm AL3 on
3	Alarm AL3 on
4	Alarm ALHB1 on
5	Alarm ALHB2 on
6	Alarm ALHB3 on
7	Alarm Lo on (value of process variable < minimum limit “Lo.S”)
8	Alarm Hi on (value of process variable < maximum limit “Hi.S”)
9	Alarm ERR on (third wire interrupted for PT100 or TC connection error)
10	Alarm SBR on (broken probe)
11	Alarm LBA on (control loop error)
12	Alarm POWER
13	-
14	-
15	-

note 10: Index 2023 defines instrument work state by means of the following bits:

0	Alarm SCR open OR
1	Alarm SCR open 1
2	Alarm SCR open 2
3	Alarm SCR open 3
4	Alarm SCR short OR
5	Alarm SCR short 1
6	Alarm SCR short 2
7	Alarm SCR short 3
8	Alarm NO VOLTAGE OR
9	Alarm NO VOLTAGE 1
10	Alarm NO VOLTAGE 2
11	Alarm NO VOLTAGE 3
12	Alarm NO CURRENT OR
13	Alarm NO CURRENT 1
14	Alarm NO CURRENT 2
15	Alarm NO CURRENT 3

note 11: Index 2024 defines instrument work state by means of the following bits:

0	Over current phase softstart
1	Over heat
2	Phase softstart active
3	Phase softstart end
4	Frequency error
5	60Hz
6	Short circuit current
7	Over peak current
8	Over rms current
9..15	-

note 12: Index 2175 displays the state of the GFX4 DIP SWITCH with the instrument’s work mode:

bit: 0	-	
1	-	
2	Work mode 1	(see “GFX4 USER MANUAL”)
3	Work mode 2	(see “GFX4 USER MANUAL”)
4	Work mode 3	(see “GFX4 USER MANUAL”)
5	-	
6	60Hz	(0=50Hz, 1=60Hz)
7	CFG forced	(1=reload default parameters at POWER-ON)
8	Simulation 4 GEFLEX	(0=**HIGH PERFORMANCE** - file GFX4HCxx.EDS) (1=**BRIDGE** - file GFX4_Cxx.EDS)
9..15	-	

note 13: L'index 5A5F displays the state of the three GFX-OP buttons "L", "S", "bUt" if appropriately configured:

bit:	0	Button "L"	(1=button pushed)
	1	Button "S"	(1=button pushed)
	2	Button "bUt"	(1=button pushed)
	3..15	-	

note 14: The actions implemented by the GFX4 after a Communication Error can be selected via INDEX 1029:

value:	0	PREOPERATIONAL state On (default)
	1	No action
	2	PREPARED state ON
	3	RESET state ON
	4	SW shutdown+ PR state ON
	5	SW shutdown
	6	SW shutdown + PREPARED state ON
	7	SW shutdown + RESET state ON
	8	Controller in manual + PREOPERATIONAL state On
	9	Controller in manual + PREPARED state ON
	10	Controller in manual + RESET state ON
	12..255	-

note 15: Index 5025 is an expansion of INDEX 6425; the valid bits are:

bit:	0	Controller ON/OFF	(1=ON)
	1	Start Selftuning	(1=Start Selftuning)
	2	Controller in manual	(1=Manual)
	3	Select SP1/SP2	(1=SP2)
	4	Start Autotuning	(1=Start Autotuning)
	5	SetPoint LOCAL/REMOTE	(1=Local)
	6..15	-	

note 16: Index 1018 SUB 2 identifies the "Device ID" of the instrument:

value:	198	GFX4 and GFXTERMO4
	212	GFX4-IR
	214	GFW

note 17: The 2021 index defines instrument work status by means of the following bits:

0	Alarm AL1 or AL2 or AL3 or AL4 or ALHB1 or ALHB2 or ALHB3 or POWER_FAULT active
1	Alarm Lo active (process variable value < min. limit "Lo.S")
2	Alarm Hi active (process variable value > max. limit "Hi.S")
3	Alarm ERR active (third wire interrupted due to PT100 or incorrect CT connection)
4	Alarm SBR active (probe interrupted)
5	Controller heating (HEAT)
6	Controller cooling (COOL)
7	Alarm LBA active (control loop error)
8	Alarm AL1 active
9	Alarm AL2 active
10	Alarm AL3 active
11	Alarm AL4 active
12	Alarm ALHB1 active
13	Alarm ALHB2 active
14	Alarm ALHB3 active
15	Selftuning active

7.1 DEFAULT PDO MAPPING GFX4HC01.EDS

PDO	COB-ID PREDEFINED (hex)	OBJECT 1 INDEX (hex)	OBJECT 1 SUB (hex)	OBJECT 2 INDEX (hex)	OBJECT 2 SUB (hex)	OBJECT 3 INDEX (hex)	OBJECT 3 SUB (hex)	OBJECT 4 INDEX (hex)	OBJECT 4 SUB (hex)	DESCRIPTION
01 TPDO	00000180+ID	7130	01	2000	01	7400	01	7401	01	1st transmit PDO GFX4 zone 1
02 TPDO	00000280+ID	7130	02	2000	02	7400	02	7401	02	2nd transmit PDO GFX4 zone 2
03 TPDO	00000380+ID	7130	03	2000	03	7400	03	7401	03	3rd transmit PDO GFX4 zone 3
04 TPDO	00000480+ID	7130	04	2000	04	7400	04	7401	04	4th transmit PDO GFX4 zone 4
01 RPDO	00000200+ID	2020	01	6412	01	201E	01	750A	01	1st receive PDO GFX4 zone 1
02 RPDO	00000300+ID	2020	02	6412	02	201E	02	750A	02	2nd receive PDO GFX4 zone 2
03 RPDO	00000400+ID	2020	03	6412	03	201E	03	750A	03	3rd receive PDO GFX4 zone 3
04 RPDO	00000500+ID	2020	04	6412	04	201E	04	750A	04	4th receive PDO GFX4 zone 4

7.2 PDO MAPPING OBJECTS NAMES GFX4HC03.EDS

PDO	OBJECT 1	OBJECT 2	OBJECT 3	OBJECT 4
1st TXPDO	Process variable 1	Operating state 1	Ammeter input value 1	Active Setpoint 1
2nd TXPDO	Process variable 2	Operating state 2	Ammeter input value 2	Active Setpoint 2
3rd TXPDO	Process variable 3	Operating state 3	Ammeter input value 3	Active Setpoint 3
4th TXPDO	Process variable 4	Operating state 4	Ammeter input value 4	Active Setpoint 4
1st RXPDO	Local Setpoint 1	Manual Power 1	Instr. operaive command 1	Alarm 1 AL.1
2nd RXPDO	Local Setpoint 2	Manual Power 2	Instr. operaive command 2	Alarm 2 AL.1
3rd RXPDO	Local Setpoint 3	Manual Power 3	Instr. operaive command 3	Alarm 3 AL.1
4th RXPDO	Local Setpoint 4	Manual Power 4	Instr. operaive command 4	Alarm 4 AL.1

7.3 LIST OF PDO'S MAPPING OBJECT GFX4HC03.EDS

INDEX (hex)	SUB INDEX	DESCRIPTION	DATA	ACC.	DEFAULT (hex)	FUNCTION	ADD. (dec)
2000	n	Operating state instrument	unsigned16	ro	-	---	467
2001	n	Process variable	integer16	ro	-	P.V.	0
2002	n	Active Setpoint	integer16	ro	-	SPA	1
2003	n	Auxiliary input value	integer16	ro	-	I.tA1	227
2004	n	Actual value of control output	integer16	ro	-	Ou.P	2
201C	n	Process variable after FLd filter	integer16	ro	-	---	349
201D	n	MASKOUT digital/relay outputs	unsigned16	ro	-	---	319
201E	n	Operative controls of instrument STATUS_W	unsigned16	rw	-	---	305
201F	n	INPUT_DIG digital input	unsigned16	ro	-	---	317
2020	n	Local Setpoint	integer16	rw	0190	_SP	138
2021	n	Operative state instrument 1	unsigned16	ro	-	---	469
2022	n	Operative state instrument 2 (note 9)	unsigned16	ro	-	---	632
2023	n	Operative state instrument 3 (note 10)	unsigned16	ro	-	---	633
2024	n	Operative state instrument 4 (note 11)	unsigned16	ro	-	---	634
2025	n	SPA-PV Deviation	integer16	ro	-	---	4
2026	n	Internal temperature of instrument	unsigned16	ro	-	---	635
2027	n	Derivate internal temperat. of dissipator	unsigned16	ro	-	DERIV_SSR	675
2028	n	Internal temperature of dissipator	unsigned16	ro	-	---	655
2029	n	ALSTATE IRQ alarm state	unsigned16	ro	-	---	318

INDEX (hex)	SUB INDEX	DESCRIPTION	DATA	ACC.	DEFAULT (hex)	FUNCTION	ADD. (dec)
202A	n	HB_ALSTATE HB alarms state	unsigned16	ro	-	---	504
202B	n	ALSTATE alarms state	unsigned16	ro	-	---	512
2030	n	Voltmetric input value phase 1	integer16	ro	-	I.tU1	232
2031	n	Voltmetric input value phase 2	integer16	ro	-	I.tU2	492
2032	n	Voltmetric input value phase 3	integer16	ro	-	I.tU3	493
2033	n	Ammeter input value phase 1	integer16	ro	-	I.tA1on	468
2034	n	Ammeter input value phase 2	integer16	ro	-	I.tA2on	498
2035	n	Ammeter input value phase 3	integer16	ro	-	I.tA3on	499
2036	n	Ammeter input value instantaneous phase 1	integer16	ro	-	I.tA1	473
2037	n	Ammeter input value instantaneous phase 2	integer16	ro	-	I.tA2	490
2038	n	Ammeter input value instantaneous phase 3	integer16	ro	-	I.tA3	491
2039	n	Voltmetric input value filtered phase 1	integer16	ro	-	I.UF1	322
203A	n	Voltmetric input value filtered phase 2	integer16	ro	-	I.UF2	496
203B	n	Voltmetric input value filtered phase 3	integer16	ro	-	I.UF3	497
203C	n	Ammeter input value filtered phase 1	integer16	ro	-	I.AF1	756
203D	n	Ammeter input value filtered phase 2	integer16	ro	-	I.AF2	494
203E	n	Ammeter input value filtered phase 3	integer16	ro	-	I.AF3	495
2040	n	HB alarm phase 1	integer16	rw	0064	A.Hb1	55
2041	n	HB alarm phase 2	integer16	rw	0064	A.Hb2	502
2042	n	HB alarm phase 3	integer16	rw	0064	A.Hb3	503
2056	n	Flag PID	unsigned16	ro	-	---	296
209F	n	Value auxiliary analogic input	integer16	ro	-	In.2	602
20B0	n	Voltage status (see note)	unsigned16	ro	-	---	702
20B1	n	Frequency (see note)	unsigned16	ro	-	FrEq	315
20B2	n	Current of peak in softstart of phase (see note)	unsigned16	ro	-	I.tAP	709
20B3	n	Chaining voltage V21 (see note)	unsigned16	ro	-	I.V21	710
20B4	n	Chaining voltage V32 (see note)	unsigned16	ro	-	I.V32	711
20B5	n	Chaining voltage V13 (see note)	unsigned16	ro	-	I.V13	712
20B6	n	Power factor (see note)	unsigned16	ro	-	CoS.F	716
20B7	n	Loaded power monophase (see note)	unsigned16	ro	-	Ld.P	719
20B8	n	Loaded power threephase (see note)	unsigned16	ro	-	Ld.P.t	720
20B9	n	Loaded impedance monophase (see note)	unsigned16	ro	-	Ld.I	749
20BA	n	Loaded impedance threephase (see note)	unsigned16	ro	-	Ld.I.t	750

7.3 LIST OF PDO'S MAPPING OBJECT GFX4HC03.EDS

INDEX (hex)	SUB INDEX	DESCRIPTION	DATA	ACC.	DEFAULT (hex)	FUNCTION	ADD. (dec)
20BB	n	Loaded voltage monophase (see note)	unsigned16	ro	-	Ld.V	751
20BC	n	Loaded voltage threephase (see note)	unsigned16	ro	-	Ld.V.t	752
20BD	n	Loaded current monophase (see note)	unsigned16	ro	-	Ld.A	753
20BE	n	Loaded current threephase (see note)	unsigned16	ro	-	Ld.A.t	754
20BF	n	Threshold of dynamic alarm HB (see note)	unsigned16	ro	-	Hb.tr	744
2226	n	Serial remote Setpoint	integer16	rw	-	SP.rS	250
2236	n	Value input IN.1 from serial	unsigned16	rw	0000	VALUE_F	347
2237	n	Value input IN.2 from serial	unsigned16	rw	0000	VALAUX_F	348
2238	n	Value input IN.TA from serial	unsigned16	rw	0000	VALTA_F	685
2371	n	Customer configuration 1	unsigned16	rw	-	---	458
2372	n	Customer configuration 2	unsigned16	rw	-	---	459
2373	n	Customer configuration 3	unsigned16	rw	-	---	460
2374	n	Customer configuration 4	unsigned16	rw	-	---	461
2375	n	Customer configuration 5	unsigned16	rw	-	---	462
5025	n	Operative commands controller word (see note 15)	unsigned16	rw	-	---	-
5A5F	0	Operating state Push-buttons GFX-OP	unsigned16	ro	-	---	685
6410	n	Actual value of output control	integer16	ro	-	Ou.P	2
6412	n	Value of output control in manual	integer16	rw	0000	Ou.P	252
7130	n	Process variable	integer16	ro	-	P.V.	0
7400	n	Ammeter input value	integer16	ro	-	I.tA1on	468
7401	n	Active Setpoint	integer16	ro	-	SPA	1
7402	n	Setpoint 1	integer16	rw	0064	SP.1	230
7403	n	Setpoint 2	integer16	rw	00C8	SP.2	231
750A	n	AL 1 alarm	integer16	rw	01F4	AL.1	12
751A	n	AL 2 alarm	integer16	rw	0258	AL.2	13
752A	n	AL 3 alarm	integer16	rw	02BC	AL.3	14
753A	n	AL 4 alarm	integer16	rw	0320	AL.4	58

NOTE: Visible objects only with GFX4-IR

INDEX (hex)	SUB INDEX	DESCRIPTION	DATA TYPE	ACC.	DEFAULT (hex)
1000	0	Device type	unsigned32	ro	00320194
1001	0	Error register	unsigned8	ro	-
1002	0	Manufacturer status register	unsigned32	ro	-
1003	0	Number of error in pre-defined error field	unsigned8	rw	-
	1	Error field n	unsigned32	ro	-
	2	Error field n-1	unsigned32	ro	-
	3	Error field n-2	unsigned32	ro	-
	4	Error field n-3	unsigned32	ro	-
	5	Error field n-4	unsigned32	ro	-
	6	Error field n-5	unsigned32	ro	-
	7	Error field n-6	unsigned32	ro	-
	8	Error field n-7	unsigned32	ro	-
1004	0	Nr. of PDOs supported	unsigned32	ro	00040044
	1	Nr. of synchronous PDOs	unsigned32	ro	00000004
	2	Nr. of asynchronous PDOs	unsigned32	ro	00040004
1005	0	COB-IB SYNC message	unsigned32	rw	00000080
1008	0	Manufact. device name (GFX)	string	ro	34584647
1009	0	Manufacturer hardware version	string	ro	02
100A	0	Manufacturer software version	string	ro	0130
100B	0	Node-ID	unsigned32	ro	-
100C	0	Guard Time	unsigned16	rw	0000
100D	0	Life Time Factor	unsigned8	rw	00
100E	0	Node Guarding Identifier	unsigned32	rw	00000700+ID
100F	0	Number of SDOs supported	unsigned32	ro	00000001
1010	0	Number of Store parameters function	unsigned8	ro	04
	1	Save all parameters	unsigned32	rw	00000001
	2	Save communication parameters	unsigned32	rw	00000001
	3	Save application parameters	unsigned32	rw	00000001
	4	Save manufacturer parameters	unsigned32	rw	00000001
1011	0	Number of Restore parameters function	unsigned8	ro	04
	1	Restore all parameters	unsigned32	rw	00000001
	2	Restore communication parameters	unsigned32	rw	00000001
	3	Restore application parameters	unsigned32	rw	00000001
	4	Restore manufacturer parameters	unsigned32	rw	00000001
1014	0	COB-IB Emergency Object	unsigned32	rw	00000080+ID
1016	0	Number of Consumer Heartbeat Time	unsigned8	ro	01
	1	Consumer Heartbeat Time	unsigned32	rw	00000000
1017	0	Producer Heartbeat Time	unsigned16	rw	0
1018	0	Number of Identity Object	unsigned8	ro	04
	1	Vendor ID	unsigned32	ro	01000093
	2	Product code (see note 16)	unsigned32	ro	-
	3	Revision number	unsigned32	ro	-
	4	Serial number	unsigned32	ro	-

INDEX (hex)	SUB INDEX	DESCRIPTION	DATA TYPE	ACC.	DEFAULT (hex)
1029	0	Nr. of Error Classes	unsigned8	ro	7
	1	Communication Error (see note 14)	unsigned8	rw	0
	2	Digital Input Error	unsigned8	rw	0
	3	Analog Input Error	unsegned8	rw	0
	4	Digital Output Error	unsigned8	rw	0
	5	Analog Output Error	unsigned8	rw	0
	6	Controller Error	unsigned8	rw	0
	7	Alarm Error	unsigned8	rw	0
1200	0	Nr. of Server SDO Parameter	unsigned8	ro	02
	1	COB-ID RX SDO	unsigned32	ro	00000600+ID
	2	COB-ID TX SDO	unsigned32	ro	00000580+ID
1400	0	Nr. of RPDO1 Communication parameter	unsigned8	ro	05
	1	COB-ID 1st RPDO GFX4 zone 1	unsigned32	rw	00000200+ID
	2	Trasmission type 1st RPDO GFX4 zone 1	unsigned8	rw	FF
	3	Inhibit time 1st RPDO GFX4 zone 1	unsigned16	rw	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 1st RPDO Geflex Master	unsigned16	rw	0
1401	0	Nr. of RPDO2 Communication parameter	unsigned8	ro	05
	1	COB-ID 2nd RPDO GFX4 zone 2	unsigned32	rw	00000300+ID
	2	Trasmission type 2nd RPDO GFX4 zone 2	unsigned8	rw	FF
	3	Inhibit time 2nd RPDO GFX4 zone 2	unsigned16	rw	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 2nd RPDO GFX4 zone 2	unsigned16	ro	0
1402	0	Nr. of RPDO3 Communication parameter	unsigned8	rw	05
	1	COB-ID 3rd RPDO GFX4 zone 3	unsigned32	rw	00000400+ID
	2	Trasmission type 3rd RPDO GFX4 zone 3	unsigned8	rw	FF
	3	Inhibit time 3rd RPDO GFX4 zone 3	unsigned16	rw	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 3rd RPDO GFX4 zone 3	unsigned16	rw	0
1403	0	Nr. of RPDO4 Communication parameter	unsigned8	ro	05
	1	COB-ID 4th RPDO GFX4 zone 4	unsigned32	rw	00000500+ID
	2	Trasmission type 4th RPDO GFX4 zone 4	unsigned8	rw	FF
	3	Inhibit time 4th RPDO GFX4 zone 4	unsigned16	rw	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 4th RPDO GFX4 zone 4	unsigned16	rw	0
1600	0	Nr. of RPDO1 Mapping parameter	unsigned8	rw	04
	1	1st object mapped for 1st RPDO GFX4 zone 1	unsigned32	rw	20200110
	2	2nd object mapped for 1st RPDO GFX4 zone 1	unsigned32	rw	64120110
	3	3rd object mapped for 1st RPDO GFX4 zone 1	unsigned32	rw	201E0110
	4	4th object mapped for 1st RPDO GFX4 zone 1	unsigned32	rw	750A0110
1601	0	Nr. of RPDO2 Mapping parameter	unsigned8	rw	04
	1	1st object mapped for 2nd RPDO GFX4 zone 2	unsigned32	rw	20200210
	2	2nd object mapped for 2nd RPDO GFX4 zone 2	unsigned32	rw	64120210
	3	3rd object mapped for 2nd RPDO GFX4 zone 2	unsigned32	rw	201E0210
	4	4th object mapped for 2nd RPDO GFX4 zone 2	unsigned32	rw	750A0210
1602	0	Nr. of RPDO3 Mapping parameter	unsigned8	rw	04
	1	1st object mapped for 3rd RPDO GFX4 zone 3	unsigned32	rw	20200310
	2	2nd object mapped for 3rd RPDO GFX4 zone 3	unsigned32	rw	64120310
	3	3rd object mapped for 3rd RPDO GFX4 zone 3	unsigned32	rw	201E0310
	4	4th object mapped for 3rd RPDO GFX4 zone 3	unsigned32	rw	750A0310

INDEX (hex)	SUB INDEX	DESCRIPTION	DATA TYPE	ACC.	DEFAULT (hex)
1603	0	Nr. of RPDO4 Mapping parameter	unsigned8	rw	04
	1	1st object mapped for 4th RPDO GFX4 zone 4	unsigned32	rw	74020410
	2	2nd object mapped for 4th RPDO GFX4 zone 4	unsigned32	rw	64120410
	3	3nd object mapped for 4th RPDO GFX4 zone 4	unsigned32	rw	201E0410
	4	4th object mapped for 4th RPDO GFX4 zone 4	unsigned32	rw	750A0410
1800	0	Nr. of TPDO1 Communication parameter	unsigned8	ro	05
	1	COB-ID 1st TPDO GFX4 zone 1	unsigned32	rw	00000180+ID
	2	Transmission type 1st TPDO GFX4 zone 1	unsigned8	rw	FF
	3	Inhibit time 1st TPDO GFX4 zone 1	unsigned16	ro	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 1st TPDO1 GFX4 zone 1	unsigned16	rw	0
1801	0	Nr of TPDO2 Communication parameter	unsigned8	ro	05
	1	COB-ID 2nd TPDO GFX4 zone 2	unsigned32	rw	00000280+ID
	2	Trasmission type 2nd TPDO GFX4 zone 2	unsigned8	rw	FF
	3	Inhibit time 2nd TPDO GFX4 zone 2	unsigned16	ro	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 2nd TPDO GFX4 zone 2	unsigned16	rw	03E8
1802	0	Nr. of TPDO3 Communication parameter	unsigned8	ro	05
	1	COB-ID 1st TPDO GFX4 zone 3	unsigned32	rw	00000380+ID
	2	Trasmission type 1st TPDO GFX4 zone 3	unsigned8	rw	FF
	3	Inhibit time 1st TPDO GFX4 zone 3	unsigned16	ro	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 1st TPDO GFX4 zone 3	unsigned16	rw	0
1803	0	Nr of TPDO4 Communication parameter	unsigned8	ro	05
	1	COB-ID 2nd TPDO GFX4 zone 4	unsigned32	rw	00000480+ID
	2	Trasmission type 2nd TPDO GFX4 zone 4	unsigned8	rw	FF
	3	Inhibit time 2nd TPDO GFX4 zone 4	unsigned16	ro	0
	4	Reserved	unsigned16	ro	-
	5	Event timer 2nd TPDO GFX4 zone 4	unsigned16	rw	0
1A00	0	Number of TPDO1 Mapping parameter	unsigned8	rw	04
	1	1st object mapped for 1st TPDO GFX4 zone 1	unsigned32	rw	71300110
	2	2nd object mapped for 1st TPDO GFX4 zone 1	unsigned32	rw	20000110
	3	3st object mapped for 1st TPDO GFX4 zone 1	unsigned32	rw	74000108
	4	4th object mapped for 1st TPDO GFX4 zone 1	unsigned32	rw	74010110
1A01	0	Number of TPDO2 Mapping parameter	unsigned8	rw	04
	1	1st object mapped for 2nd TPDO GFX4 zone 2	unsigned32	rw	71300210
	2	2nd object mapped for 2nd TPDO GFX4 zone 2	unsigned32	rw	20000210
	3	3st object mapped for 2nd TPDO GFX4 zone 2	unsigned32	rw	74000208
	4	4th object mapped for 2nd TPDO GFX4 zone 2	unsigned32	rw	74010210
1A02	0	Number of TPDO3 Mapping parameter	unsigned8	rw	04
	1	1st object mapped for 3rd TPDO GFX4 zone 3	unsigned32	rw	71300310
	2	2nd object mapped for 3rd TPDO GFX4 zone 3	unsigned32	rw	20000310
	3	3st object mapped for 3rd TPDO GFX4 zone 3	unsigned32	rw	74000308
	4	4th object mapped for 3rd TPDO GFX4 zone 3	unsigned32	rw	74010310
1A03	0	Number of TPDO4 Mapping parameter	unsigned8	rw	04
	1	1st object mapped for 4th TPDO GFX4 zone 4	unsigned32	rw	71300410
	2	2nd object mapped for 4th TPDO GFX4 zone 4	unsigned32	rw	20000410
	3	3st object mapped for 4th TPDO GFX4 zone 4	unsigned32	rw	74000408
	4	4th object mapped for 4th TPDO GFX4 zone 4	unsigned32	rw	74010410

Il SUB-INDEX “n” identifies the GFX4 pertaining to that CANopen node
(es. 1(dec) = zone 1 ,..., 4 (dec) = zone 4).

DEVICE AND MANUFACTURER PROFILE CANopen GFX4HC03.EDS						GFX4 MODBUS	
INDEX (hex)	SUB INDEX	DESCRIPTION	DATA	ACC.	DEFAULT (hex)	FUNCTION	ADD. (dec)
bit operative control							
6421	n	Controller in manual	boolean	rw	0	Auto/Man	1
6424	n	Start Selftuning	boolean	rw	0	Selftuning	3
2232	n	SoftwareOFF	boolean	rw	0	OFF	11
2005	n	Start Autotuning	boolean	rw	0	Autotuning	29
2006	n	Enable remote Setpoint	boolean	rw	0	Loc/Rem	10
6420	n	SP1/SP2 selection	boolean	rw	0	SP1/SP2	75
650D	n	Alarm 1 active	boolean	ro	0	Status AL1	4
651D	n	Alarm 2 active	boolean	ro	0	Status AL2	5
652D	n	Alarm 3 active	boolean	ro	0	Status AL3	62
653D	n	Alarm 4 active	boolean	ro	0	Status AL4	69
2008	n	Alarm LBA active	boolean	ro	0	Status LBA	8
2007	n	Alarm HB active (OR of TA1,TA2,TA3)	boolean	ro	0	Status HB	26
2009	n	Output 1 active	boolean	ro	0	Status rL.1	12
200A	n	Output 2 active	boolean	ro	0	Status rL.2	13
200B	n	Output 3 active	boolean	ro	0	Status rL.3	14
200C	n	Output 4 active	boolean	ro	0	Status rL.4	15
200D	n	Output 5 active	boolean	ro	0	Status rL.5	16
200E	n	Output 6 active	boolean	ro	0	Status rL.6	17
2010	n	Selftuning active	boolean	ro	0	Status Selftuning	0
2011	n	Autotuning active	boolean	ro	0	Status Autotuning	28
2012	n	Softstart active	boolean	ro	0	Status Softstart	63
2013	n	Digital input 1 active	boolean	ro	0	Status diG1	68
2014	n	Probe fault SBR	boolean	ro	0	Status SBR	9
2015	n	Alarm HB active (TA phase 1)	boolean	ro	0	Status HB1	76
2016	n	Alarm HB active (TA phase 2)	boolean	ro	0	Status HB2	77
2017	n	Alarm HB active (TA phase 3)	boolean	ro	0	Status HB3	78
2018	n	Status power alarm	boolean	ro	0	Status PW	80
2019	n	Reset alarms memory	boolean	rw	0	Reset AL	79
201A	n	Hold input active	boolean	rw	0	Hold	64
2080	n	Alarm 1 direct/inverse	boolean	rw	0	AL1 direct	46
2084	n	Alarm 1 absolute/relative	boolean	rw	0	AL1 absolute	47
2088	n	Alarm 1 normal/symmetrical	boolean	rw	0	AL1 normal	48
208C	n	Alarm 1 to disabled on power-up	boolean	rw	0	AL1 disable	49
2090	n	Alarm 1 with memory	boolean	rw	0	AL1 memory	50
2081	n	Alarm 2 direct/inverse	boolean	rw	0	AL2 direct	54
2085	n	Alarm 2 absolute/relative	boolean	rw	0	AL2 absolute	55
2089	n	Alarm 2 normal/symmetrical	boolean	rw	0	AL2 normal	56
208D	n	Alarm 2 to disabled on power-up	boolean	rw	0	AL2 disable	57
2091	n	Alarm 2 with memory	boolean	rw	0	AL2 memory	58
2082	n	Alarm 3 direct/inverse	boolean	rw	0	AL3 direct	36
2086	n	Alarm 3 absolute/relative	boolean	rw	0	AL3 absolute	37
208A	n	Alarm 3 normal/symmetrical	boolean	rw	0	AL3 normal	38
208E	n	Alarm 3 to disabled on power-up	boolean	rw	0	AL3 disable	39
2092	n	Alarm 3 with memory	boolean	rw	0	AL3 memory	40
2083	n	Alarm 4 direct/inverse	boolean	rw	0	AL4 direct	70
2087	n	Alarm 4 absolute/relative	boolean	rw	0	AL4 absolute	71
208B	n	Alarm 4 normal/symmetrical	boolean	rw	0	AL4 normal	72
208F	n	Alarm 4 to disabled on power-up	boolean	rw	0	AL4 disable	73
2093	n	Alarm 4 con memoria	boolean	rw	0	AL4 memory	74
200F	n	Reset allarme LBA	boolean	rw	0	Reset LBA	81
2095	n	Alarm state OUT1	boolean	ro	0	Status OUT1	82
2096	n	Alarm state OUT2	boolean	ro	0	Status OUT2	83
2097	n	Alarm state OUT3	boolean	ro	0	Status OUT3	84

DEVICE AND MANUFACTURER PROFILE CANopen			GFX4HC03.EDS			GFX4 MODBUS	
INDEX (hex)	SUB INDEX	DESCRIPTION	DATA	ACC.	DEFAULT (hex)	FUNCTION	ADD. (dec)
		bit operative command					
2098	n	Alarm state OUT4	boolean	ro	0	Status OUT4	85
2099	n	Alarm state OUT5	boolean	ro	0	Status OUT5	86
209A	n	Alarm state OUT6	boolean	ro	0	Status OUT6	87
209B	n	Alarm state OUT7	boolean	ro	0	Status OUT7	88
209C	n	Alarm state OUT8	boolean	ro	0	Status OUT8	89
209D	n	Alarm state OUT9	boolean	ro	0	Status OUT9	90
209E	n	Alarm state OUT10	boolean	ro	0	Status OUT10	91
201B	n	Digital input 2 ON	boolean	ro	0	Status diG2	92
2094	n	Reset diagnostics alarms	boolean	rw	0	Reset DIAG	105
		GFX4-IR bit operative command					
20A0	n	Softstart Phase ON	boolean	ro	0	-	106
20A1	n	Softstart Phase OFF	boolean	ro	0	-	107
20A2	n	Restart Softstart	boolean	rw	0	-	108
20A3	n	Calibration voltage feedback	boolean	rw	0	-	109
20A4	n	Calibration current feedback	boolean	rw	0	-	110
20A5	n	Calibration power feedback	boolean	rw	0	-	111
20A6	n	Calibration HB alarm	boolean	rw	0	-	112
20A7	n	Calibration feedback selected in Hd.6	boolean	rw	0	-	113
20A8	1	Restart Softstart	boolean	rw	0	Restart	30
20F0	n	SSR_SHORT Phase 1 alarm state	boolean	ro	0	SHORT1	96
20F1	n	SSR_SHORT Phase 2 alarm state	boolean	ro	0	SHORT2	97
20F2	n	SSR_SHORT Phase 3 alarm state	boolean	ro	0	SHORT3	98
20F3	n	NO_VOLTAGE Phase 1 alarm state	boolean	ro	0	NO_VOLT1	99
20F4	n	NO_VOLTAGE Phase 2 alarm state	boolean	ro	0	NO_VOLT2	100
20F5	n	NO_VOLTAGE Phase 3 alarm state	boolean	ro	0	NO_VOLT3	101
20F6	n	NO_CURRENT Phase 1 alarm state	boolean	ro	0	NO_CUR1	102
20F7	n	NO_CURRENT Phase 2 alarm state	boolean	ro	0	NO_CUR2	103
20F8	n	NO_CURRENT Phase 3 alarm state	boolean	ro	0	NO_CUR3	104
		Work registers					
7130	n	Process variable	integer16	ro	-	P.V.	0
2001	n	Process variable	integer16	ro	-	P.V.	0
7401	n	Setpoint active	integer16	ro	-	SPA	1
2002	n	Setpoint active	integer16	ro	-	SPA	1
2020	n	Local Setpoint (see note 1)	integer16	rw	0190	_SP	138
7402	n	Setpoint 1 (see note 1)	integer16	rw	0064	SP.1	230
7403	n	Setpoint 2 (see note 1)	integer16	rw	00C8	SP.2	231
2226	n	Serial remote Setpoint	integer16	rw	-	SP.rS	250
2025	n	SPA-PV Deviation	integer16	ro	-	---	4
209F	n	Value of auxiliary analog input	integer 16	ro	-	In.2	602
7400	n	Current transformer value	integer16	ro	-	I.tA1on	468

DEVICE AND MANUFACTURER PROFILE CANopen			GFX4HC03.EDS			GFX4 MODBUS	
INDEX (hex)	SUB INDEX	DESCRIPTION	DATA	ACC.	DEFAULT (hex)	FUNCTION	ADD. (dec)
2003	n	Auxiliary input value	integer16	ro	-	I.tA1	227
6410	n	Curent value of control output	integer16	ro	-	Ou.P	2
2004	n	Curent value of control output	integer16	ro	-	Ou.P	2
2030	n	Voltmeter input value phase 1	integer16	ro	-	I.tU1	232
2031	n	Voltmeter input value phase 2	integer16	ro	-	I.tU2	492
2032	n	Voltmeter input value phase 3	integer16	ro	-	I.tU3	493
2033	n	Ammeter input value phase 1	integer16	ro	-	I.tA1on	468
2034	n	Ammeter input value phase 2	integer16	ro	-	I.tA2on	498
2036	n	Ammeter input value instantaneous phase 1	integer16	ro	-	I.tA1	473
2037	n	Ammeter input value instantaneous phase 2	integer16	ro	-	I.tA2	490
2038	n	Ammeter input value instantaneous phase 3	integer16	ro	-	I.tA3	491
2039	n	Voltmetric input value filtered phase 1	integer16	ro	-	I.UF1	322
203A	n	Voltmetric input value filtered phase 2	integer16	ro	-	I.UF2	496
203B	n	Voltmetric input value filtered phase 3	integer16	ro	-	I.UF3	497
203C	n	Ammeter input value filtered phase 1	integer16	ro	-	I.AF1	756
203D	n	Ammeter input value filtered phase 2	integer16	ro	-	I.AF2	494
203E	n	Ammeter input value filtered phase 3	integer16	ro	-	I.AF3	495
2035	n	Ammeter input value phase 3	integer16	ro	-	I.tA3on	499
750A	n	Alarm 1 setpoint	integer16	rw	01F4	AL.1	12
751A	n	Alarm 2 setpoint	integer16	rw	0064	AL.2	13
752A	n	Alarm 3 setpoint	integer16	rw	02BC	AL.3	14
753A	n	Alarm 4 setpoint	integer16	rw	0320	AL.4	58
2040	n	Alarm HB setpoint phase 1	integer16	rw	0064	A.Hb1	55
2041	n	Alarm HB setpoint phase 2	integer16	rw	0064	A.Hb2	502
2042	n	Alarm HB setpoint phase 3	integer16	rw	0064	A.Hb3	503
6412	n	Control output value in manual	integer16	rw	0000	Ou.P	252
201C	n	Process variable after Fld filter	integer16	ro	-	---	349
201D	n	Digital/relays outputs MASKOUT	unsigned16	ro	-	---	319
201E	n	Operating commands instr. STATUS_W	unsigned16	rw	-	---	305
201F	n	Digital inputs value INPUT_DIG	unsigned16	ro	-	---	317
2056	n	PID flag state	unsigned16	ro	-	---	296
2029	n	ALSTATE IRQ alarms state	unsigned16	ro	-	---	318
202A	n	HB ALSTATE_HB alarms state	unsigned16	ro	-	---	504
202B	n	ALSTATE alarms state	unsigned16	ro	-	---	512
GFX4-IR Work registers							
20B0	n	Voltage status	unsigned16	ro	-	---	702
20B1	n	Frequency	unsigned16	ro	-	FrEq	315
20B2	n	Current of pic in softstart	unsigned16	ro	-	I.tAP	709
20B3	n	Chaining voltage V21	unsigned16	ro	-	I.V21	710

DEVICE AND MANUFACTURER PROFILE CANopen			GFX4HC03.EDS			GFX4 MODBUS	
INDEX (hex)	SUB INDEX	DESCRIPTION	DATA	ACC.	DEFAULT (hex)	FUNCTION	ADD. (dec)
20B4	n	Chaining voltage V32	unsigned16	ro	-	I.V32	711
20B5	n	Chaining voltage V13	unsigned16	ro	-	I.V13	712
20B6	n	Power factor	unsigned16	ro	-	CoS.F	716
20B7	n	Loaded power monophase	unsigned16	ro	-	Ld.P	719
20B8	n	Loaded power threephase	unsigned16	ro	-	Ld.P.t	720
20B9	n	Loaded impedance monophase	unsigned16	ro	-	Ld.I	749
20BA	n	Loaded impedance threephase	unsigned16	ro	-	Ld.I.t	750
20BB	n	Loaded voltage monophase	unsigned16	ro	-	Ld.V	751
20BC	n	Loaded voltage threephase	unsigned16	ro	-	Ld.V.t	752
20BD	n	Loaded current monophase	unsigned16	ro	-	Ld.A	753
20BE	n	Loaded current threephase	unsigned16	ro	-	Ld.A.t	754
20BF	n	HB dynamic alarm	unsigned16	ro	-	Hb.tr	744
20CF	n	Reference of feedback	unsigned16	ro	-	AriF	757
Information registers (InFo)							
2227	n	Builder code GEFRAN	unsigned16	ro	5000	-	120
2221	n	Device ID	unsigned16	ro	-	d.Id	121
2222	n	Software version	unsigned16	ro	-	UPd	122
2223	n	Voltage on load	unsigned16	ro	-	FUSE	509
2224	n	Main input self-diagnostics error code	unsigned16	ro	-	Err	85
2225	n	Auxiliary input self-diagnostics error code	unsigned 16	ro	-	Er.2	606
2170	n	Hardware configuration	unsigned16	ro	-	C.Hd	190
2171	n	Expanded HW configuration	unsigned16	ro	-	C.Hd1	508
2175	n	Jumper state (see note 12)	unsigned 16	ro	-	- - -	346
2176	n	Fieldbus software version	unsigned 16	ro	-	Upd.F	693
2177	n	Fieldbus Node address	unsigned 16	ro	-	Cod.F	695
2178	n	Fieldbus baudrate	unsigned 16	ro	-	bAU.F	696
Controller configuration registers (CFG)							
2050	n	Enable selftuning,autotuning	unsigned16	rw	0000	S.tu	31
7450	n	Proportional heating band	integer16	rw	000A	h.Pb	5
7452	n	Integral heating time	integer16	rw	0190	h.It	7
7454	n	Derivative heating time	integer16	rw	0064	h.dt	8
6414	n	Max. limit heating power	integer16	rw	03E8	h.P.H	42
6413	n	Min. limit heating power	integer16	rw	0000	h.P.L.	254
2220	n	Cooling fluid	integer16	rw	0000	C.ME	513
2234	n	Cooling setpoint relative to heating	integer16	rw	0000	c.SP	39
7451	n	Proportional cooling band	integer16	rw	000A	c.Pb	6
7453	n	Integral cooling time	integer16	rw	0190	c.It	76
7455	n	Derivative cooling time	integer16	rw	0064	c.dt	77

DEVICE AND MANUFACTURER PROFILE CANopen			GFX4HC03.EDS			GFX4 MODBUS	
INDEX (hex)	SUB INDEX	DESCRIPTION	DATA	ACC.	DEFAULT (hex)	FUNCTION	ADD. (dec)
		Controller configuration registers (CFG)					
2052	n	Reference voltage for manual power correction	integer16	rw	0000	riF	505
2054	n	Manual power correction	integer16	rw	0000	Cor	506
2060	n	Max. limit cooling power	integer16	rw	03E8	c.P.H	43
2062	n	Min. limit cooling power	integer16	rw	0000	c.P.L.	255
2064	n	Manual reset	integer16	rw	0000	rSt	78
2066	n	Reset power	integer16	rw	0000	P.rS	516
2068	n	Antireset	integer16	rw	0000	A.rS	79
206A	n	Feedforward	integer16	rw	0000	FFd	80
206C	n	Softstart time	integer16	rw	0000	Sof	147
206E	n	Hysteresis for alarm 1	integer16	rw	FFFF	Hy.1	27
2070	n	Hysteresis for alarm 2	integer16	rw	FFFF	Hy.2	30
2072	n	Hysteresis for alarm 3	integer16	rw	FFFF	Hy.3	53
2074	n	Hysteresis for alarm 4	integer16	rw	FFFF	Hy.4	59
2076	n	Delay time HB alarm trip	integer16	rw	001E	Hb.t	56
2078	n	Delay time LBA alarm trip	integer16	rw	012C	Lb.t	44
207A	n	Limit for power supplied with LBA alarm	integer16	rw	00FA	Lb.P	119
207C	n	Fault Action power	integer16	rw	0000	FA.P	228
207E	n	Set gradient	integer16	rw	0000	G.SP	234
207F	n	Set gradient for SP2	integer16	rw	0000	G.S2	259
206D	n	Phase softstart time	integer16	rw	0000	PS.oF	629
206B	n	Maximum phase softstart	integer16	rw	-	PS.Hi	630
		Hot Runners controller configuration registers (CFG)					
2100	n	Power alarm intervention delay	integer16	rw	0000	P.Ft	260
2102	n	Hot Runners stability band	integer16	rw	0000	b.St	261
2104	n	Hot Runners power alarm band	integer16	rw	0000	b.PF	262
2106	n	Hot Runners Set point soft start	integer16	rw	0000	SP.S	263
2108	n	Hot Runners soft start power	integer16	rw	0000	So.P	264

DEVICE AND MANUFACTURER PROFILE CANopen			GFX4HC03.EDS			GFX4 MODBUS	
INDEX (hex)	SUB INDEX	DESCRIPTION	DATA	ACC.	DEFAULT (hex)	FUNCTION	ADD. (dec)
GFX4-IR (CFG) configuration registers							
20C0	n	Abilitazione modalità di innesco	unsigned16	rw	0000	Hd.5	703
20C1	n	Ramp duration of phase softstart	unsigned16	rw	00C8	PS.tm	705
20C2	n	Limit maximum current in ramp softstart phase	unsigned16	rw	-	PS.tA	706
20C3	n	Limit maximum current rating	unsigned16	rw	-	Fu.tA	707
20C4	n	Minimal number cycles BF	unsigned16	rw	0001	bF.Cy	704
20C5	n	First delay trigger innesco	unsigned16	rw	0000	dL.t	708
20C6	n	Time of OFF before the delay trigger first in.	unsigned16	rw	00C8	dL.oF	738
20C7	n	Percentage threshold alarm in calibration HB	unsigned16	rw	01F4	Hb.P	737
20C8	n	Proporzional band for feedback	unsigned16	rw	03E8	Fb.Pb	740
20C9	n	Integral time for feedback	unsigned16	rw	0000	Fb.It	741
20CA	n	Current found in calibration HB	unsigned16	rw	0000	Hb.tA	742
20CB	n	Power found in calibration HB	unsigned16	rw	0000	Hb.Pw	743
20CC	n	Min input range CT 1	unsigned16	rw	-	L.tA1	746
20CD	n	Min input range CT 2	unsigned16	rw	-	L.tA2	747
20CE	n	Min input range CT 3	unsigned16	rw	-	L.tA3	748
20E0	n	Point 0 CT input from calibration HB	unsigned16	rw	-	Ir.00	758
20E1	n	Point 1 CT input from calibration HB	unsigned16	rw	-	Ir.01	759
20E2	n	Point 2 CT input from calibration HB	unsigned16	rw	-	Ir.02	760
20E3	n	Point 3 CT input from calibration HB	unsigned16	rw	-	Ir.03	761
20E4	n	Point 4 CT input from calibration HB	unsigned16	rw	-	Ir.04	767
20E5	n	Point 5 CT input from calibration HB	unsigned16	rw	-	Ir.05	768
20E6	n	Point 6 CT input from calibration HB	unsigned16	rw	-	Ir.06	769
20E8	n	Control output gradient	unsigned16	rw	-	G.Out	763
20E9	n	Uscita minima di innesco	unsigned16	rw	-	Lo.P	764
20EA	n	Percentage of power output	unsigned16	rw	-	P.PEr	765
20EB	n	Offset of power output	unsigned16	rw	-	P.oFS	766
Serial interface configuration parameters (Ser)							
2342	n	Instrument ID code	unsigned16	ro	-	Cod	46
2344	n	Select Modbus baud rate serial 1	unsigned16	ro	-	bAu	45
2345	n	Select Modbus baud rate serial 2	unsigned16	ro	-	bAu.2	626
2172	n	Select Modbus parity serial 1	unsigned16	ro	-	PAr	47
2173	n	Select Modbus parity serial 2	unsigned16	ro	-	PAr.2	627
2174	n	Input management from serial	unsigned16	rw	0000	S.In	224
2217	n	Phisical digital output state	unsigned16	ro	-	---	664
2218	n	Output management from serial	unsigned16	rw	0000	S.Ou	225
2219	n	Control LEDs and inputs from serial	unsigned16	rw	0000	S.LI	628

DEVICE AND MANUFACTURER PROFILE CANopen			GFX4HC03.EDS			GFX4 MODBUS	
INDEX (hex)	SUB INDEX	DESCRIPTION	DATA	ACC.	DEFAULT (hex)	FUNCTION	ADD. (dec)
Serial interface configuration parameters (Ser)							
2228	n	Input/output value from serial in RAM	unsigned16	rw	-	V_IN_OUT	344
2230	n	LED value from serial in RAM	unsigned16	rw	-	V_X_LEDS	351
2236	n	Value Input In.1 from serial	unsigned16	rw	0000	VALUE_F	347
2237	n	Value Input In.2 from serial	unsigned16	rw	0000	VALAUX_F	348
2238	n	Value Input In.CT from serial	unsigned16	rw	0000	VALTA_F	685
Input configuration parameters (InP)							
2200	n	Define remote Setpoint	unsigned16	rw	0000	SP.r	18
6110	n	Input probe type (note 2)	integer16	rw	2710	Typ	400
221a	n	Auxiliary input probe type	integer16	rw	0000	tP.2	181
2202	n	Digital input filter in seconds	integer16	rw	0001	Flt	24
2204	n	Digital input filter in input scale points	integer16	rw	0005	Fld	179
6132	n	Decimal point position for input scale	unsigned8	rw	0000	dP.S	403
6407	n	Decimal point position for ammeter input	unsigned8	rw	00	dP.S	403
7148	n	Min limit input scale	integer16	rw	0000	Lo.S	401
7149	n	Max limit input scale	integer16	rw	03E8	Hi.S	402
7124	n	Input Offset correction	integer16	rw	0000	oFS	519
2206	n	Digital input filter CT in seconds	integer16	rw	0000	Ft.tA	219
2208	n	Digital input filter VT in seconds	integer16	rw	0000	Ft.tU	412
2210	n	Max limit input CT scalephase 1	integer16	rw	-	H.tA1	405
2212	n	Input Offset correction CT phase 1	integer16	rw	0000	o.tA1	220
2240	n	Max limit input CT scale phase 2	integer16	rw	-	H.tA2	413
2242	n	Input Offset correction CT phase 2	integer16	rw	0000	o.tA2	415
2244	n	Max limit input CT scale phase 3	integer16	rw	-	H.tA3	414
2246	n	Input Offset correction CT phase 3	integer16	rw	0000	o.tA3	416
2214	n	Max limit input VT scale phase1	integer16	rw	14B4	H.tU1	410
2216	n	Input Offset correction VT phase 1	integer16	rw	0000	o.tU1	411
2248	n	Max limit input VT scale phase 2	integer16	rw	14B4	H.tU2	417
224A	n	Input Offset correction VT phase 2	integer16	rw	0000	o.tU2	419
224C	n	Max limit input VT scale phase 3	integer16	rw	14B4	H.tU3	418
224E	n	Input Offset correction VT phase 3	integer16	rw	0000	o.tU3	420
7404	n	Min settable limit SP and alarms	integer16	rw	0000	Lo.L	25
7405	n	Max settable limit SP and alarms	integer16	rw	03E8	Hi.L	26
221C	n	Min limit auxiliary input scale	integer16	rw	0000	LS.2	404
222A	n	Max limit auxiliary input scale	integer16	rw	1000	HS.2	603
222B	n	Digital filter auxiliary input	integer16	rw	0001	FLt.2	604
222C	n	Decimal point positionauxiliary input	integer16	rw	0000	dP.2	677
222D	n	Correction offset auxiliary input	integer16	rw	0000	oFS.2	605

DEVICE AND MANUFACTURER PROFILE CANopen			GFX4HC03.EDS			GFX4 MODBUS	
INDEX (hex)	SUB INDEX	DESCRIPTION	DATA	ACC.	DEFAULT (hex)	FUNCTION	ADD. (dec)
Output configuration parameters (Out)							
2300	n	Select magnitude ref. alarm 1	unsigned16	rw	0000	A1.r	215
2302	n	Select magnitude ref. alarm 2	unsigned16	rw	0000	A2.r	216
2304	n	Select magnitude ref. alarm 3	unsigned16	rw	0000	A3.r	217
2306	n	Select magnitude ref. alarm 4	unsigned16	rw	0000	A4.r	218
2308	n	Alarm type 1	unsigned16	rw	0000	A1.t	406
2310	n	Alarm type 2	unsigned16	rw	0000	A2.t	407
2312	n	Alarm type 3	unsigned16	rw	0000	A3.t	408
2314	n	Alarm type 4	unsigned16	rw	0000	A4.t	409
2316	n	HB alarm function	unsigned16	rw	0000	Hb.F	57
2318	n	Assign function OUT 1	unsigned16	rw	0000	rL.1	160
2320	n	Assign function OUT 2	unsigned16	rw	0001	rL.2	163
2322	n	Assign function OUT 3	unsigned16	rw	0002	rL.3	166
2324	n	Assign function OUT 4	unsigned16	rw	0023	rL.4	170
2326	n	Assign function OUT 5	unsigned16	rw	0004	rL.5	171
2328	n	Assign function OUT 6	unsigned16	rw	00A0	rL.6	172
7456	n	Cycle time OUT 1	integer16	rw	-	Ct.1	152
7457	n	Cycle time OUT 2	integer16	rw	-	Ct.2	159
2330	n	Define status of action Fault outputs	unsigned16	rw	0000	rEL	229
232E	n	Percentage of Heat or Cool on Out7	unsigned16	rw	-	RAP	421

DEVICE AND MANUFACTURER PROFILE CANopen		GFX4HC03.EDS				GFX4 MODBUS	
INDEX (hex)	SUB INDEX	DESCRIPTION	DATA	ACC.	DEFAULT (hex)	FUNCTION	ADD. (dec)
Hardware configuration parameter (Hrd)							
2332	n	Enable Multiset via serial	unsigned16	rw	0000	hd.1	191
2334	n	Control type	unsigned16	rw	0006	Ctr	180
2336	n	Enable alarms	unsigned16	rw	0013	AI.n	195
2338	n	Digital input function	unsigned16	rw	0000	diG	140
2339	n	Digital input 2 function	unsigned16	rw	0000	diG.2	618
2340	n	Status RN led function	unsigned16	rw	0010	Ld.St	197
2341	n	ER LED function	unsigned16	rw	000C	Ld.2	619
234A	n	DI1 LED function	unsigned16	rw	0006	Ld.3	620
234B	n	DI2 LED function	unsigned16	rw	000B	Ld.4	621
234C	n	O1 LED function	unsigned16	rw	0001	Ld.5	622
234D	n	O2 LED function	unsigned16	rw	0002	Ld.6	623
234E	n	O3 LED function	unsigned16	rw	0003	Ld.7	624
234F	n	O4 LED function	unsigned16	rw	0004	Ld.8	625
2346	n	Auxiliary input selection	unsigned16	rw	0000	AI.2	194
2348	n	Hot Runners functions selection	unsigned16	rw	0000	Hot	265
2350	n	Attribute OUT1 physical output	unsigned16	rw	0001	out.1	607
2351	n	Attribute OUT2 physical output	unsigned16	rw	0002	out.2	608
2352	n	Attribute OUT3 physical output	unsigned16	rw	0003	out.3	609
2353	n	Attribute OUT4 physical output	unsigned16	rw	0004	out.4	610
2354	n	Attribute OUT5 physical output	unsigned16	rw	0005	out.5	611
2355	n	Attribute OUT6 physical output	unsigned16	rw	0006	out.6	612
2356	n	Attribute OUT7 physical output	unsigned16	rw	0007	out.7	613
2357	n	Attribute OUT8 physical output	unsigned16	rw	0008	out.8	614
2358	n	Attribute OUT9 physical output	unsigned16	rw	0011	out.9	615
2359	n	Attribute OUT10 physical output	unsigned16	rw	0012	out.10	616
2360	n	Attribute zone process variable	unsigned16	rw	----	SPU	617
2361	n	Enable POWER_FAULT alarms	unsigned16	rw	0000	hd.2	660
2362	n	Refresh rate InTA (GFX4)	unsigned16	rw	000A	dG.t	661
2363	n	NO_VOLTAGE alarms time filter	unsigned16	rw	000A	dG.F	662
2364	n	Minimum power to acquisire In.TA (GFX4)	unsigned16	rw	0064	dG.P	663
2365	n	Enable heuristic power control	unsigned16	rw	0000	hd.3	680
2366	n	Max. current for heuristic power control	unsigned16	rw	0000	I.HEU	681
2367	n	Enable heterogeneous power control	unsigned16	rw	0000	hd.4	682
2368	n	Max. current for heterogeneous pwr con	unsigned16	rw	0000	I.Het	683
2369	n	Modality ON	unsigned16	rw	0000	P.On.t	699
2370	n	Modality OFF SW	unsigned16	rw	0000	OFF.t	700

DEVICE AND MANUFACTURER PROFILE CANopen			GFX4HC03.EDS			GFX4 MODBUS	
INDEX (hex)	SUB INDEX	DESCRIPTION	DATA	ACC.	DEFAULT (hex)	FUNCTION	ADD. (dec)
GFX4-IR (Hrd) Hardware configuration parameter							
20D0	n	Feedback modality ON	unsigned16	rw	0000	Hd.6	730
20D1	n	Correction maximum feedback of voltage	unsigned16	rw	0000	Cor.V	731
20D2	n	Correction maximum feedback of current	unsigned16	rw	0000	Cor.I	732
20D3	n	Correction maximum feedback of power	unsigned16	rw	0000	Cor.P	733
20D4	n	Reference voltage feedback	unsigned16	rw	0000	rif.V	734
20D5	n	Reference current feedback	unsigned16	rw	0000	rif.I	735
20D6	n	Reference power feedback	unsigned16	rw	0000	rif.P	736
Custom linearization for main input (Lin)							
5000	n	Step 0 start scale value	integer16	rw	0000	S.00	86
5001	n	Step 1 scale	integer16	rw	001F	S.01	87
“	“	“	“	“		“	“
501F	n	Step 31 scale	integer16	rw	02B8	S.31	117
5020	n	Step 32 full scale value	integer16	rw	03E8	S.32	118
5021	n	Step 33 mV start scale for CT probe	integer16	rw	0000	S.33	293
5022	n	Step 34 mV full scale for CT probe	integer16	rw	0001	S.34	294
5023	n	Step 35 mV at TAMB 50°C for CT probe	integer16	rw	0000	S.35	295
Commonly used parameters not described in GFX4 manual							
2000	n	Instrument work status (note 3)	unsigned16	ro	-	---	467
2021	n	Instrument work state 1	unsigned16	ro	-	-	469
2022	n	Instrument work state 2 (note 9)	unsigned16	ro	-	-	632
2023	n	Instrument work state 3 (note 10)	unsigned16	ro	-	-	633
2024	n	Instrument work state 4 (note 11)	unsigned16	ro	-	-	634
2026	n	Temperature inside instrument	unsigned16	ro	-	-	635
2027	n	Derivative temperature internal heatsink	unsigned16	ro	-	DERIV_SSR	675
2028	n	Temperature inside heatsink	unsigned16	ro	-	-	655
2371	n	Configuration User 1	unsigned16	rw	-	---	458
2372	n	Configuration User 2	unsigned16	rw	-	---	459
2373	n	Configuration User 3	unsigned16	rw	-	---	460
2374	n	Configuration User 4	unsigned16	rw	-	---	461
2375	n	Configuration User 5	unsigned16	rw	-	---	462
5025	n	Commands of operative controller	unsigned16	rw	-	---	-
5A5A	0	Select CANopen baud rate (note 4)	unsigned8	rw	2		
5A5B	0	Select NODE ID (note 5)	unsigned 32	rw	-		
5A5D	0	Watch dog rete CANBUS (note 6)	unsigned16	rw	0000		
5A5F	n	Operative pushbutton GFX-OP (note)	unsigned16	ro	-	---	685
1029	0	Nr. of Error behaviour objects	unsigned8	ro	7	see CiA DS404	
	1	Communication Error	unsigned16	rw	-		
	2	Digital Input Error	unsigned16	rw	0000		
	3	Analog Input Error	unsigned16	rw	-		
	4	Digital Output Error	unsigned16	rw	0000		
	5	Analog Output Error	unsigned16	rw	0000		
	6	Controller Error	unsigned16	rw	0000		
	7	Alarm Error	unsigned16	rw	0000		

DEVICE AND MANUFACTURER PROFILE CANopen			GFX4HC03.EDS			GFX4 MODBUS	
INDEX (hex)	SUB INDEX	DESCRIPTION	DATA	ACC.	DEFAULT (hex)	FUNCTION	ADD. (dec)
Commonly used parameters not described in GFX4 manual							
7133	n	Max variation PV for PDO “Event”	integer16	rw	0000	see CiA DS404	
6406	n	Physical unit ammeter input value	unsigned32	ro	002D0000	see CiA DS404	
6415	n	Physical unit power output value	unsigned32	ro	00000000	see CiA DS404	
6422	n	Controller ON/OFF	boolean	rw	1	see CiADS404	
6425	n	Oper. commands enable byte (note 7)	unsigned8	rw	-	see CiA DS404	
6509	n	Action performed with alarm AL1 active	unsigned8	ro	02	see CiA DS404	
6519	n	Action performed with alarm AL2 active	unsigned8	ro	02	see CiA DS404	
6529	n	Action performed with alarm AL3 active	unsigned8	ro	02	see CiA DS404	
6539	n	Action performed with alarm AL4 active	unsigned8	ro	02	see CiA DS404	
6600	n	Status of alarms AL1 - AL4	unsigned8	ro	-	see CiA DS404	
6427	n	Controller status (note 8)	unsigned16	ro	-	see CiA DS404	

note 1: If the Enable multiset “hd.1” (index 2332) parameter equals 0 (default), the active Setpoint “SPA” (index 2002) corresponds to the local Setpoint “_SP” (index 2020).
If the Enable multiset “hd.1” (index 2332) parameter equals 1 or 3, the active Setpoint “SPA” (index 2002) corresponds to Setpoint 1 (index 7404) or Setpoint 2 (index 7403).

note 2: The input probe type “TyP” is made Gefran-specific by adding 10,000 to the values described in the GEFLEX Modbus manual (ex. CT J °C = 2710hex, CT J °F = 2711hex, PT100 °C = 272Ehex).

note 3: The 2000 index defines instrument work status by means of the following bits:

0 Alarm AL1 or AL2 or AL3 or AL4 or ALHB active
1 Alarm Lo active (process variable value < min. limit “Lo.S”)
2 Alarm Hi active (process variable value > max. limit “Hi.S”)
3 Alarm ERR active (third wire interrupted due to PT100 or incorrect CT connection)
4 Alarm SBR active (probe interrupted)
5 Controller heating (HEAT)
6 Controller cooling (COOL)
7 Alarm LBA active (control loop error)
8 Alarm AL1 active
9 Alarm AL2 active
10 Alarm AL3 active
11 Alarm AL4 active
12 Alarm ALHB active
13 Controller in software shutdown (OFF)
14 Controller in manual (MAN)
15 Controller in remote Setpoint (REM)

note 4: The change in the value of index 5A5A is acquired at the next power-up.
Table of CANopen baud rate values:

0 1000 kbit/s
1 800 kbit/s
2 500 kbit/s (default)
3 250 kbit/s
4 125 kbit/s
5 100 kbit/s
6 50 kbit/s
7 20 kbit/s
8 10 kbit/s

note 5: Default reads the value of the rotary switch (from 01 to 99).
You can set from 01 to 127 with SDO.
Write 0xFF000000 to reset the rotary switch read.

note 6: Value expressed in msec.
If there are no messages in the CANBUS network for this time, the GEFLEX allows connection of the GFX OP terminal to the internal bus.

note 7: According to CiA DS404 valid bits are:

0 Controller ON/OFF (1 = ON)
1 Start Selftuning (1 = Start Selftuning)
2 Manual controller (1 = Manual)
3 SP1/SP2 selection

nota 8: According to CiA DS404 valid bits are:

bit: 0 Controller ON/OFF (1= ON)
1 Start Selftuning (1= Start Selftuning)
2 Manual controller (1= Manuale)
3 SP1/SP2 selection (1= SP2)

note 9: Index 2022 defines instrument work state by means of the following bits:

0	Alarm AL1 on
1	Alarm AL2 on
2	Alarm AL3 on
3	Alarm AL3 on
4	Alarm ALHB1 on
5	Alarm ALHB2 on
6	Alarm ALHB3 on
7	Alarm Lo on (value of process variable < minimum limit “Lo.S”)
8	Alarm Hi on (value of process variable < maximum limit “Hi.S”)
9	Alarm ERR on (third wire interrupted for PT100 or TC connection error)
10	Alarm SBR on (broken probe)
11	Alarm LBA on (control loop error)
12	Alarm POWER
13	-
14	-
15	-

note 10: Index 2023 defines instrument work state by means of the following bits:

0	Alarm SCR open OR
1	Alarm SCR open 1
2	Alarm SCR open 2
3	Alarm SCR open 3
4	Alarm SCR short OR
5	Alarm SCR short 1
6	Alarm SCR short 2
7	Alarm SCR short 3
8	Alarm NO VOLTAGE OR
9	Alarm NO VOLTAGE 1
10	Alarm NO VOLTAGE 2
11	Alarm NO VOLTAGE 3
12	Alarm NO CURRENT OR
13	Alarm NO CURRENT 1
14	Alarm NO CURRENT 2
15	Alarm NO CURRENT 3

note 11: Index 2024 defines instrument work state by means of the following bits:

0	Over current phase softstart
1	Over heat
2	Phase softstart active
3	Phase softstart end
4	Frequency error
5	60Hz
6	Short circuit current
7	Over peak current
8	Over rms current
9..15	-

note 12: Index 2175 displays the state of the GFX4 DIP SWITCH with the instrument’s work mode:

bit:		
0	-	
1	-	
2	Work mode 1	(see “GFX4 USER MANUAL”)
3	Work mode 2	(see “GFX4 USER MANUAL”)
4	Work mode 3	(see “GFX4 USER MANUAL”)
5	-	
6	60Hz	(0=50Hz, 1=60Hz)
7	CFG forced	(1=reload default parameters at POWER-ON)
8	Simulation 4 GEFLEX	(0=**HIGH PERFORMANCE** - file GFX4HCxx.EDS) (1=**BRIDGE** - file GFX4_Cxx.EDS)
9..15	-	

note 13: L'index 5A5F displays the state of the three GFX-OP buttons "L", "S", "bUt" if appropriately configured:

bit:	0	Button "L"	(1=button pushed)
	1	Button "S"	(1=button pushed)
	2	Button "bUt"	(1=button pushed)
	3..15	-	

note 14: The actions implemented by the GFX4 after a Communication Error can be selected via INDEX 1029:

value:	0	PREOPERATIONAL state On (default)
	1	No action
	2	PREPARED state ON
	3	RESET state ON
	4	SW shutdown+ PR state ON
	5	SW shutdown
	6	SW shutdown + PREPARED state ON
	7	SW shutdown + RESET state ON
	8	Controller in manual + PREOPERATIONAL state On
	9	Controller in manual + PREPARED state ON
	10	Controller in manual + RESET state ON
	12..255	-

note 15: Index 5025 is an expansion of INDEX 6425; the valid bits are:

bit:	0	Controller ON/OFF	(1=ON)
	1	Start Selftuning	(1=Start Selftuning)
	2	Controller in manual	(1=Manual)
	3	Select SP1/SP2	(1=SP2)
	4	Start Autotuning	(1=Start Autotuning)
	5	SetPoint LOCAL/REMOTE	(1=Local)
	6..15	-	

note 16: Index 1018 SUB 2 identifies the "Device ID" of the instrument:

value:	198	GFX4 and GFXTERMO4
	212	GFX4-IR
	214	GFW

note 17: The 2021 index defines instrument work status by means of the following bits:

0	Alarm AL1 or AL2 or AL3 or AL4 or ALHB1 or ALHB2 or ALHB3 or POWER_FAULT active
1	Alarm Lo active (process variable value < min. limit "Lo.S")
2	Alarm Hi active (process variable value > max. limit "Hi.S")
3	Alarm ERR active (third wire interrupted due to PT100 or incorrect CT connection)
4	Alarm SBR active (probe interrupted)
5	Controller heating (HEAT)
6	Controller cooling (COOL)
7	Alarm LBA active (control loop error)
8	Alarm AL1 active
9	Alarm AL2 active
10	Alarm AL3 active
11	Alarm AL4 active
12	Alarm ALHB1 active
13	Alarm ALHB2 active
14	Alarm ALHB3 active
15	Selftuning active